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3275 West Ina Road,
Suite 130, Tucson,
Arizona 85741
p 520.881.8008
f 520.325.7925
aginglifecare.org

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EDITOR'S MESSAGE

Kaaren Boothroyd, Editor

This issue of the *Journal* contains a real variety of content – bringing valuable, practical information to all Aging Life Care Professionals® and others working in the field of aging.

Dealing with substance abuse disorders and mental health remains a complex mix of challenges for all practitioners. Dr. Henderson's article focuses on the perspectives of family members of substance users. She identifies supports that are available and the extent to which they are accessible to diverse populations.

Pharmacists Dr. Angela Hill and Dr. Inez Victorian tackle the issue of managing polypharmacy in the geriatric population. They share their vast experience in the implementation of polypharmacy management strategies in their extremely informative article.

The topic of age-friendly communities is increasingly being discussed not just among professionals, but also by consumers and the mainstream press. Ms. Jacobs and Dr. Pestine-Stevens's article shares both the academic and practical work they have done together as participants of the North Jersey Network of Age Friendly Communities.

Urinary incontinence is a continuing issue for professionals working with aging adults and their families. Dr. Dowling-Castronovo provides a published evidence-based protocol that provides ALCMs with an overview of the assessment and management of UI and a list of available resources that will enable them to better serve their clients.

We welcome your comments on this issue of the *Journal* and encourage you to let us know what topics you are interested in reading in future issues.

—Kaaren Boothroyd, Editor

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Supportive Healing for Diverse Families Affected by Substance Use Disorders and Mental Health

Tanya M. Henderson, EdD, LMHC, CASAC II

Introduction

While substance use is a worldwide issue, the American opioid epidemic catalyzed the investment in treatment options for substance users in the United States. The National Institute on Drug Abuse (2017) estimated that $740 billion was allocated to combatting the use of alcohol and other illicit drugs. By 2018, the Substance Abuse and Mental Health Services Administration (SAMHSA) (2020) reported in the 2018 National Survey on Drug Use and Health that 9.2 million adults have co-existence of substance use disorders (SUD) and mental health disorders. Researchers have widely reported the use of family-based treatments to support the recovery efforts of co-occurring disorders; however, less is known about support for family members. Despite the allocation of funds for drug treatment, few researchers have studied family members' perceptions of substance-use and mental health services. Even less is known about family member perspectives of their own support needs. Furthermore, some communities, such as the Black community, have been oppressed, discriminated against, and systematically prevented from gaining access to co-occurring supports and services (Gaston, Earl, Nisanci, and Glomb, 2016; Hanna, Boyce, and Yang, 2017; Hardy and Qureshi, 2012).

Substance-use and mental health-related research often focuses heavily on the perspective of the individual with illness or diagnosis, with limited focus on family members. The documented barriers to treatment for families are congruent with this study's findings and other scholarly literature. Furthermore, research on underrepresented people of color with co-occurring disorders is scarce.

Racial and ethnic minorities represent a growing segment of the US population, currently accounting for 28% and 16% of the US population, respectively. More than half of the increase in the US population from 2000 to 2010 was a result of the increase in number of Latinos (i.e., individuals identifying as Hispanic or Latino). With a 43% increase from 2000 to 2010, Asians represent the fastest growing racial population in the US. Unfortunately, research has consistently shown that racial/ethnic minorities face greater barriers to care than non-minorities and are more likely to underutilize mental health services (Mericle, Ta, Holck, and Arria, 2012).

This research provides an overview and an analysis of the supports and services that are used (or not used) by family members as well as how the services are regarded by diverse and underrepresented family members.

Problem Statement

When family members make efforts to access the help available to them, they are often, through no fault of their own, unable to secure this support, and therefore cannot support their substance-using relatives (McCann, Lubman, Boardman, and Flood, 2017). In terms of communities of color, the literature on substance use has focused on prevention methods for adolescents (Hardy and Qureshi, 2012; Stewart, 2003), the criminal aspects of substance use (Cooper, 2015; Eaton et al., 2013), and the repercussions for family reunification (Murphy, Harper, Griffiths, and Joffrion, 2017). The collective memory of traumatic historical events and policies adversely affecting communities of color persist down the generations, resulting in fundamental distrust of systems. Recurring acts of oppression, discrimination, and isolation further trigger post-traumatic defenses against a system that has historically served more as a threat than a help.

Despite the scarcity of research, there is, nonetheless, a disproportionate lack of support services available within underrepresented communities to help families cope with the strain of having substance-using relatives (Johnson and Young, 2002; Orford, Templeton, Velleman, and Copello, 2005). The specific needs and wants of families affected by substance use are primarily unaddressed by substance-use programs. In particular, Black people are systematically underserved and are, therefore, generally absent from family-based support programs (Clark et al., 2014; Usher, McShane, and Dwyer, 2015). Support is minimal for most, if not all, Black families of substance users, with few programs that can tend

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to the specific cultural needs of diverse families (Jeffers, 2019). This study aims to provide greater insight into the perspective of underrepresented family members regarding substance-use support services.

Methodology and Data Analysis

The first phase of the research process involved recruiting underrepresented family members of substance users by accessing professional and personal networks within the researcher's community. The second phase of the research process included a series of virtual semi-structured interviews on the Zoom platform with 10 participants who met the qualifying criteria. Table 1 provides an overview of the study participants' demographic information. Six of the participants were adult children of substance users. Of those six participants, two had dual roles of being a daughter and a niece of substance users and being a daughter and a sibling of elder substance users. Two of the participants were grandmothers of substance users. Of the grandmothers, one was also the mother of a substance user. The remaining two participants were, respectively, a wife and a father of substance users. Most of the participants were female, with eight identifying as female and two identifying as male. Six of the 10 participants were over the age of 50 years.

The data analysis consisted of reading and rereading of the transcripts, the initial coding, the development of themes and subthemes, and the connection of patterns across the collected data. The following four themes emerged concerning family-based substance-use supports: (a) health and wellness, (b) types of family-member supports, (c) challenges and obstacles, and (d) cultural influences across a person's lifetime.

The purpose of the interpretative phenomenological analysis employed here was to provide greater insight into substance-use supports designed for the substance users' families from the perspectives of family members of substance users, and to assign meaning and depth to the lived experiences of this population (Cottrell & McKenzie, 2011).

Findings

This study explored the perspectives of family members of substance users. The findings of this research give meaning to use of or lack of supports by explaining and contextualizing aspects of the social, spiritual, and cultural issues faced by the communities of color. Three themes: 1. ***Types of informal, semiformal, and formal supports***, 2. ***Ways supports can help families***, 3. ***Obstacles in accessing and utilizing supports*** emerged from the 10 participants' lived experiences as family members of substance users.

Types of supports. All the participants were able to identify some types of family-member supports. They described intimate relationships, spirituality, and community-based supports, which fall into two of the three levels of support: informal, semiformal, and formal.

Informal support. Informal supports are intimate relationships with close friends, relatives, and significant others. These relationships are considered reliable and can provide emotional support, although the people involved often have limited knowledge of substance use disorders. Research by Bentelspacher, Duncan, Collins, Scandell, and Regulus (2006) studied family members who depended on support from informal social networks, a community of relatives and friends. Consistent with that study and the broader literature, this research found that participants also availed themselves of a range of support from relatives and friends. Family members without the support of relatives withdrew from other related supports and services because of their considerable distrust in, and fear of judgment from, family and friends regarding substance-use problems in their families.

Semiformal supports. Semiformal supports refer to spirituality, self-help support groups, and the workplace. Nine of the 10 participants indicated prayer and faith as constant supports. While many participants in this study spoke of practices in the church that they found supportive, such as prayer and fellowship, a few of the participants who attended church did not feel comfortable disclosing their "family issues" there and simply used prayer as a support. This finding is consistent with Montgomery, Stewart, Bryant, and Ounpraseuth (2014), who found that religious practices reinforced emotional coping techniques for managing life stressors. These results emphasize the concept of the spirituality rather than the construct of the church.

Table 1 | Participant Demographics

Pseudonym	Relation	Age	Relatives' Drug(s) of Choice
Participant 1	Daughter	38	Crack cocaine
Participant 2	Daughter	34	Alcohol
Participant 3	Wife	56	Crack cocaine
Participant 4	Sister and Daughter	55	Opiates and cannabis
Participant 5	Niece and Daughter	56	Crack cocaine
Participant 6	Grandmother	67	Cocaine
Participant 7	Grandmother and Mother	58	Cannabis, benzodiazepine, and cocaine
Participant 8	Daughter	38	Crack cocaine
Participant 9	Father	61	Polysubstance
Participant 10	Son	38	Crack cocaine

Previous researchers have focused on whether there are adequate supports and substance use disorders resources and training in the workplace for healthcare professionals and practitioners (Hutchinson & Allnock, 2014). In contrast to previous research, these participants focused on their field of work rather than on the perceived support from colleagues in workplaces. This unexpected finding explored career and occupationally related support, rather than support from colleagues in the workplace.

From the perspective of community-based support, few participants were familiar with self-help meetings such as Al-Anon, Nar-Anon, and other family-member support meetings. A significant difference between this study and the previous literature is the cultural component. Although the participants in the Stenton, Best, and Roberts (2014) study were concerned with the accessibility of self-help support groups, the sample was predominantly White. Although self-help support groups are open to the public and cannot discriminate by race, the previous studies suggest by the demographics of the participants that the self-help support groups did not meet the cultural needs of underrepresented family members of substance users.

Formal supports. Formal supports are professional services provided by experts such as counseling services and therapy. The participants spoke of the benefit of having a safe outlet to discuss their concerns and address generational trauma. There are similarities between the attitudes expressed by the participants in this study and those described by Cohen-Filipic and Bentley (2014), who noted that family members complained about a lack of diversity in clinicians and the need for increased outreach to families. The participants expressed concerns about accessibility to clinicians of color and their substance use disorders knowledge.

Ways supports can help families. The family members perceived that the support they received from relatives, friends, and community programs or services did not meet their needs. Every participant expressed gratitude for their informal supports while expressing a need for more semiformal and formal supports. In a study by Arlington and Miller (2000), different variables were attached to informal supports for families. They included material, practical, informational, and emotional support provided to family members of substance users. Concerning material support, some families recalled receiving monetary support once or twice from other relatives during their early childhood years. The participants did not remember receiving practical support, such as help with daily tasks or chores, from anyone other than a spouse or a relative with whom they shared a residence. Informational supports signify access to resources, written material, literature, media pages, web pages, or books for the affected families of substance-using individuals (Arlington and Miller, 2000). Further, study participants stressed the importance of emotional support not only from experts but also from people in similar circumstances to themselves. This suggests that such support and educational groups can serve a dual purpose by providing information and skills and by offering the support and solidarity of people with similar experiences. Family members are most empowered when they are given accurate information and the knowledge to make informed decisions regarding their substance-using relative.

Obstacles in accessing and utilizing supports. This study has demonstrated that there were both internal and external barriers to participants' ability to access support. The internal barriers were cultural influences relating to the family cycle, distrust of others, and codes of silence. The external barriers were stigma, institutional obstacles, and programmatic constraints. Taken together, these are prominent barriers that prevented the participants from accessing much-needed support.

Internal barriers. Nearly all of the participants reported that the delay in help seeking was derived from the belief that asking for help makes one appear weak and that one should "Show no sign of weakness." The most significant finding was the code of silence within the Black community. All of the participants mentioned iterations of the theme "What goes on in the house, stays in the house." A possible explanation for the code of silence is what other studies have called generational distrust (Gaston, Earl, Nisanci, and Glomb, 2016; Hatcher, Mendoza, and Hansen, 2018; Williamson, Bigman, and Quick, 2019). Distrust is reaffirmed by family members across multiple generations and repeated within the family cycle. In addition, many of the participants frequently mentioned family cycle in the context of family origin, early exposure to substances, and trauma. Most of the participants identified multiple relatives as being an adult child of alcohol and drug users. The participants felt that previous generations had "hoarded" the information by remaining silent about family issues, while the newer generation was intent on breaking the cycle with open discussions to promote healing.

External barriers. The family members acknowledged institutional problems with systems, programmatic obstacles in the community, and stigma toward families of substance users as indirect influences and factors that prevented them from accessing support. This is consistent with the literature that found challenges were related to misinformation (Cohen-Filipic and Bentley, 2015), awareness of supports (Sell and Magor-Blatch, 2016), stigma (Hutchinson and Allnock, 2014), and professional training (Hardy and Qureshi, 2012; Johnson and Young, 2002; Platter and Kelley, 2012). The participants described incidents of getting inaccurate information on where and how to get support. Often the participants expressed frustration about the lack of awareness of a program's very existence because of minimal visibility and publicity. Other participants recalled being judged and scrutinized for their relatives' substance use disorders and for their continued relationships with the substance-using relatives. Overall, from the perspective of family members of substance users, the desire to access support may be overshadowed by numerous obstacles and challenges.

Recommendations for Improving Practice

The findings of this study have helped to create a roadmap for un-

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derstanding the lived experiences of family members of substance users, and the findings have suggested ways for them to heal. This study suggests that substance use disorder experts, Aging Life Care Management personnel, leaders, policymakers, and other related stakeholders can gain insight into experiences of substance using families, impacting the lives of family members of all ages, elder and young. Understanding the unique dynamics of families ensures family members' emotional, physical, and mental health needs are met and no longer ignored. Table 2 outlines recommendations for improving practice specifically for professionals and family members of substance users to better support families' healing.

Supportive healing stages and recommendations. The supportive healing stages in this section were informed by the sentiments expressed by the participants of this study to improve practices. The participants explicitly provided recommendations for families with substance use disorders and addiction professionals. All five stages vary in the length of time a person would be in each stage and, overall, they are subject to family members' acceptance of the support.

The first stage, the *state of uncertainty*, is the ground-level stage where all family members begin. In the state of uncertainty, family members may be unaware of their relative's substance use disorder or assume their relative is engaging in the recreational use of substances. It is recommended to provide families with early-intervention information so they can learn about substance use disorders.

In the second stage, the *state of awareness*, the family members know the relative has a substance use disorder. In the state of awareness, family members begin to discover the extent of the relative's substance use. At this time, family members may question their relative's behavior and seek advice from close family and friends. It is recommended that school-age children related to substance users participate in support groups for families affected by substance use. Children must have a safe space, guarded by policy, to minimize the risk of reprisal in terms of reports of abuse or neglect in their homes. For adults of all ages, community support groups or online support groups that vary by level of experience are recommended, so they are less intimidating for newcomers.

The third stage, the *state of confusion*, refers to family members seeking a way to understand their experiences with their substance-using relative. In the state of confusion, family members may try to bargain and plead with their relative to stop using substances. At this stage, family members may use their power in the relationship to get the relative into treatment. It is recommended that an outreach effort to the family be provided as part of treatment and to maintain ongoing communication and education about the treatment process. It is vital at this time to assess the health and well-being of all the family members.

The fourth stage, the *state of reconciliation*, occurs both externally with the substance-using relative and internally within family members. The state of reconciliation includes agreements in which families decide how to engage with one another. Family members erect boundaries and accept that they cannot make their relative change. Most critically, in this stage, family members reassess their relationships and decide how accessible they will be to the substance-using family member. It is recommended at this stage that family members participate in self-help support groups to develop a separate identity from the substance-using relative and their substance use disorders.

Table 2 | Supportive Healing Stages and Support Recommendation

STAGES	DESCRIPTION	SUPPORT RECOMMENDATION
1.State of uncertainty	A vague understanding of substance use disorders and no knowledge of a relative's substance use	Early intervention in schools, after-school, and community programs
2.State of awareness	The development of knowledge, learning the signs, and changing behavior when a relative is under the influence	Support groups specializing in written material specific to families and self-care practices
3.State of confusion	More questions, bargaining, pleading, and self-blame	Outreach to family members for family counseling, education on the treatment process, and inquiry into well-being
4.State of reconciliation	Acceptance of powerlessness over a relative's substance use disorders and reassessment of relationships with relatives	Self-help support meetings for families in similar circumstances Individual counseling and therapy
5.State of self-acceptance	Self-love and regained power for self-removal of external shame, acknowledgment of hurt	Individual counseling and therapy

In the fifth and final stage, the *state of self-acceptance*, family members experience self-actualization and transformation. The state of self-acceptance allows the family members to shed the feelings of guilt, shame, and blame. In this stage, family members can begin to address unhealed wounds within the family and restore the power they lost.

Recommendations for Policy

The results of this study have led to recommendations for education and training changes in the behavioral health field. These are recommendation for educational leaders responsible for setting student learning standards and developing curricula. It is recommended that behavioral health-related certification and all collegiate programs be revised to require substance use disorders courses. Specifically, national groups can provide education on family-based supports and the cultural needs of diverse families. Currently, substance use disorders courses are offered as electives—if at all. The changes to the educational coursework will increase the knowledge of substance use disorders for professionals entering the field. For clinicians already practicing in the field of addiction, training about the influence substance use disorders on family dynamics is recommended. As a best practice, training should be provided on an ongoing basis and be easily accessible to professionals. In addition, substance use disorders-related resources should be available in all behavioral health practices to increase the visibility of informational supports for families affected by substance use disorders. Lastly, it is recommended to cultivate diversity among clinicians to improve equity.

Limitations

The primary goal of this research was to gain insight into the experience of underrepresented family members of substance users and to understand their perceptions of substance-use supports. The main limitation of this study was that data were collected from only three regions of New York State. The inclusion and exclusion criteria limits of family relationship required five years of a shared residence and relatives' alcohol and/or drug use within five years. The narrow context and participant criteria could potentially limit the transferability of this study to other settings. In addition, the small sample size may not be generalizable to a larger sample.

Recommendations for Future Research

Research on family members of substance users often generalizes across populations, and future research should address the cultural complexity of other ethnic groups, sexual orientations, and religious groups. Acknowledging the experience of people of color is the key to understanding underrepresented communities and the family dynamics within diverse communities. In the future, it may be beneficial to (a) focus on a larger sample, (b) consider multigenerational families, and (c) sample participants nationally and internationally. Further research on diverse families of substance users could elaborate, in culturally specific ways, on these supportive healing stages. There is also an opportunity for research to further explore the supportive healing stages and their application in family-based programs.

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Tanya M. Henderson, EdD, LMHC, CASAC II

Tanya Henderson is a 2020 graduate of St. John Fisher College, Executive Leadership doctorial program. She received a Bachelor of Science degree in Sociology and Child and Family Studies from SUNY Oneonta in 2010, and a Master of Science degree in Education in 2014 from The College of St. Rose. Throughout her 10 years in the field of behavioral health and human services, she has served as a Licensed Mental Health Counselor and is a Credentialed Alcoholism and Substance Abuse Counselor in the Capital Region of New York State. Additionally, she has volunteered in the Capital Region with the Community Hospice Grief Services since 2013 and with the Domestic Violence Services since 2014. Currently, Tanya Henderson is the Founder and Chief Executive Officer of Our Village Services, LLC., a New York-based counseling practice whose primary mission is to break down barriers and generational traumas for families and individuals of color who are affected by mental health problems and substance use disorders.

Our Village Services, LLC | 1525 Western Avenue, Suite 1, Albany, NY 12203
Phone: 518-629-5409 | Email: thenderson@ourvillageservice.com | www.ourvillageservices.com

Prescriber, Patient, Caregiver, and Pharmacists' Roles for Managing Polypharmacy in the Geriatric Population

Angela M. Hill, PharmD, CRPh and Inez Victorian, PharmD, BCPS

Learning Objectives

Explain the impact of polypharmacy on health outcomes in aging patients.

Describe the role of patients, prescribers, and other health professionals in managing polypharmacy.

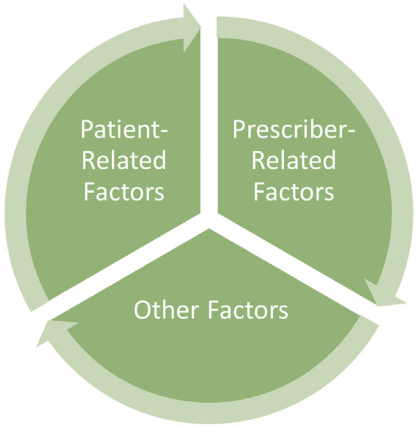
Provide strategies for patients, caregivers, and healthcare professionals to reinforce adherence.

Describe techniques used by pharmacists to minimize medication-related problems and drug interactions, and to reinforce adherence in the aging population.

Scope of the Problem

Polypharmacy is defined as the use of five or more prescription, nonprescription, herbal and vitamins products. Polypharmacy is more prevalent in geriatric patients because they are more likely to have multiple disease states and to use numerous providers, each of whom prescribes medications. Polypharmacy is allowable for some diseases like hypertension and diabetes, but with the increased use of medications comes an increased risk of side and adverse effects, drug interactions, financial costs to the patient, and other medication-related problems that can lead to emergency room visits and hospitalizations (Morin, Johnell, Laroche, Fastbom, and Wastesson, 2018). Further, aging persons are at greater risk of medication-related problems because of declining organ function, comorbid medical conditions, and changes or decline in other bodily processes. Depending on the type and number of medications, additional consequences of polypharmacy for aging patients include cognitive decline, decreased quality of life, depression, psychological distress, unintentional falls, and additional expenses (Morin et al., 2018; Bazargan et al., 2017; Wastesson, Morin, Tan, and Johnell, 2018).

Polypharmacy can result from the collective choices made by patients, prescribers, and the health-care system. Having the opportunity to choose their pharmacies and prescribers, patients may choose more than one without there being any coordination or communication addressing the use of medication. Consumers have access to nonprescription, herbal, and vitamin products in community pharmacies, in grocery and retail stores, and via the internet. Unfortunately, consumers aren't always educated about these products prior to using them, and so sacrifice guidance that pharmacists and other health professionals can provide. There is conflicting information on the impact of race, ethnicity, employment, and education, but these factors can influence medication outcomes also. (Assari and Bazargan, 2019; Sarwar, Iftikhar, and Sarfraz, 2018; Parekh, Ali, Davies, and Rajkumar, 2018). Cultural preferences can also impact adherence. The choice and number of medications and the number of prescribers involved in the care of patients also play a role in polypharmacy. Lastly, insurance issues, socioeconomic status, and transitions of care can contribute to polypharmacy. This article will provide strategies for caregivers, patients, and healthcare providers to consider.



Role of Patients and Caregivers

Patients and caregivers play a key role in managing the day-to-day consequences of medication use. The most critical initiative regarding safe patient medication management is to proactively set smart priorities for medication adherence. Adherence, or the proper use of medication, is one of the most important responsibilities that patients and caregivers have in the medication use process. The basis of adherence lies in understanding the rationale and expectations for individual medications. Additionally, quality adherence begins with patients' and / or caregivers' thorough understanding of each medication prescribed. The best place to gain understanding is during interactions with prescribers, pharmacists, and others involved in the care process. Patients and caregivers should ask their prescriber specific questions regarding medi-

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cations that are prescribed, and they should capitalize on the opportunity to gain additional knowledge from the pharmacist who dispenses the medication. They should also proactively solicit insight regarding the purpose of medications that have been prescribed as well as adverse events and other medication-related problems. Another important patient role is to learn when medication(s) should be taken and about patient-specific factors that impact them. Taking these opportunities to learn can be self-empowering for patients.

Table 1 lists key questions to ask prescribers when they are prescribing medications. Another option is to maximize support from pharmacists regarding how the medication can be taken to avoid side effects or medication problems. Patients and caregivers should also read all medication information that they receive with prescriptions to ensure that they understand the expectations of the medications. It is also prudent for patients and caregivers to utilize the valuable resource of the Choosing Wisely Campaign. This national initiative focuses on promoting conversations between clinicians and patients while assisting patients in making good choices regarding their care. Prevention of harm to patients and taking medications safely are significant parts of the Choosing Wisely Campaign. Managing polypharmacy is inextricably intertwined with patient harm prevention and taking medication safely.

Role of Prescribers

Prescribers (i.e., physicians, physician assistants, and nurse practitioners) can employ several strategies to minimize the impact of polypharmacy. Pharmacological treatment options should take into consideration all of the medications the patient is taking. Since healthcare practitioners, especially primary care practitioners, are the first line defense against drug-disease interactions, comprehensive medication reviews and medication reconciliations are essential. All healthcare practitioners should coordinate and communicate with specialists when there are concerns about duplication of therapy, dosing, length of therapy, etc. They should also conduct a review regarding the use of nonprescription, herbals, and vitamins in addition to prescription products.

Prescribers and other clinicians can also employ tools that will help identify inappropriate medications that may cause cognitive impairment, falls, blood pressure changes, sedation, etc. Once inappropriate medications are identified, deprescribing plans can be formulated to eliminate the unnecessary medications if the prescriber determines that the medication has the potential to cause more risks than benefits. A study by Hajjar and colleagues (2005) assessed the prevalence of polypharmacy upon hospital discharge. Among 384 patients studied, 41.4% were taking at least five to eight medications and 37.2% were taking nine or more medications. Overall, 58.6% of patients took one or more unnecessary prescribed drugs (Hajjar et al., 2005).

Deprescribing can be a complex and lengthy process depending on the medications involved. For example, benzodiazepines and other psychotropics should be tapered when discontinued to avoid rebound or withdrawal symptoms. There are proactive and reactive prescribing initiatives. Proactive initiatives are usually more advantageous. An example of a proactive initiative is the Veterans Affairs Healthcare System's emphasis on proactive de-escalation and discontinuation of inhaled corticosteroids for COPD patients in all settings where those patients receive care. The reasons are risk mitigation and enhancement of disease management, health outcomes, and quality of life. The details of this initiative are shown in Table 2. Transitions of care from emergency rooms, hospitals, and institutions are examples of occasions when proactive deprescribing occurs. Prescribers can use tools such as the Beers Criteria® and others listed in Table 4, which identify inappropriate medications in a regimen (Bazargan, Smith, Movassaghi, Martins, Yazdanshenas, et al., 2017; Bazargan, Smith, and King, 2018; Somers, Mallet, van der Cammen, Robays, and Petrovic, 2012). Once the inappropriate medications are identified, prescribers can then determine how to deprescribe them. There are some circumstances in which reactive deprescribing initiatives are inevitable. For example, deprescribing can be initiated when patients experience adverse effects from a medication.

Deprescribing plans may take time, and require lengthy tapering periods to avoid rebound, withdrawal symptoms, or disease recurrence. Older patients are ideal for deprescribing, because they often take more than five medications and have at least two or more medical problems. Patients who are institutionalized or at the end of life are also prime candidates for deprescribing. Target medications that prescribers should consider for deprescribing after hospitalization include, but are not limited to, proton pump inhibitors (e.g., omeprazole, pantoprazole), H2A antagonists (e.g., cimetidine, famotidine), benzodiazepines (e.g., alprazolam, lorazepam), and antipsychotics (e.g., haloperidol, risperidone). As previously mentioned, it is not uncommon for patients to take

Table 1 | Questions to Ask Prescribers and Pharmacists Regarding Medications

What is the indication for the medication?
What is the name, color, shape, and route of administration?
Who prescribed the medication?
When will the medication start working?
What should be monitored when the medication is used?
What medications, nonprescription medications, vitamins, or herbals should be avoided while using this medication?

more than one medication to manage hypertension, diabetes, asthma, or glaucoma. Prescribers should be sure to optimize dosing on as few medications as possible, and should always seek to find the most tolerable, cost efficient, and appropriate medication for patients based on age, comorbid medical problems, allergies, and adherence patterns.

Prescribers also have the responsibility of monitoring medications and can do this in various ways. During the patient visit, prescribers can educate patients on what to expect from the medications and use information from the physical assessment of the patient to ensure the appropriate medication choice. Prescribers are also expected to order timely and appropriate laboratory tests to avoid unnecessary adverse effects and organ damage, particularly in aging patients. Some examples of medications that require laboratory monitoring include diuretics, such as furosemide; anticoagulants, such as like warfarin; and anticonvulsants, such as carbamazepine.

Lastly, an area that is starting to gain traction in the context of patient care is the practice of prescribers, particularly primary care practitioners, communicating to everyone involved in the care of the patient and vice versa to ensure coordination of care. This measure is now becoming a requirement for reimbursement of services, in an attempt to improve therapeutic outcomes by minimizing unnecessary hospitalizations, disease complications, and medication use. One example of "best practices" regarding communication and reimbursement from Center for Medicare and Medicaid Services (CMS) in the Veterans Affairs system includes interdisciplinary geriatric care teams and programs in which there is proactive collaboration throughout the entire care process. Another "best practice" is medical informatics, which includes the use of electronic health records, telehealth, follow-up telephone calls, or visits within three to five days post-discharge. Medical informatics is an ideal way to accommodate interdisciplinary communication and involvement in all the patient's care. Medical informatics should optimize interoperability for all lifecare services. The Veterans Affairs has been allowing consumers to use their personal laptops or providing laptops to veterans to overcome access issues for telehealth visits.

Table 2: De-escalation and Discontinuation of Inhaled Corticosteroids (ICS) in COPD Patients

Ensure that the inhaled corticosteroid (ICS) dose is tapered and follow-up appointment for re-evaluation is completed. Use of a COPD Assessment Test (CAT) Score at each appointment is a good practice.
During de-escalation of ICS activities, ensure that patients have not had any recent admissions for or exacerbations of their COPD. If they have, postpone de-escalating ICS until the patient is stable.
Try to optimize inhaler regimen at the same appointment if possible (e.g., if the patient is on a long-acting beta agonist (LABA)+ ICS, convert the regimen to a LABA+ long-acting muscarinic antagonist (LAMA) and taper ICS.

Roles of the Pharmacist

Pharmacists can assist with managing polypharmacy by providing comprehensive medication reviews, monitoring deprescribing interventions, recommending adherence tools, assuring that the costs of medications are not interfering with patient access to the medications, and providing feedback to prescribers when side effects and adverse effects are experienced by patients (American College of Clinical Pharmacy, et al., 2015). Pharmacists in the community setting can implement medication refill synchronization programs and provide patient education on the expected outcomes of new and chronic medications, while pharmacists in inpatient settings can provide bedside recommendations to prescribers, patient education, discharge counseling, and follow-up after a hospitalization to support the medication use process.

One major way that pharmacists help manage polypharmacy is by identifying drug-drug, drug-disease, drug-food, or drug-herbal interactions. The pharmacist can suggest strategies to minimize drug interactions by advising patients on the appropriate times to take their medications, storage considerations, and whether there are special considerations that ensure positive outcomes for patients, such as whether to take them on an empty stomach or with a full meal, and other special techniques to avoid problems with absorption. Because of their depth of knowledge on pharmacokinetics and pharmacodynamics, formulations, and other therapeutic considerations for medications, pharmacists are uniquely positioned to educate patients on timing of medications to avoid interactions. Pharmacokinetics – which describes the processes associated with the absorption, distribution, metabolism, and excretion of medications – is important for aging individuals because they are more sensitive to side effects and dosing of medications. Pharmacodynamics – which describes a drug's mechanism of action and the biological and physiological processes it undergoes to provide its therapeutic effects – is equally important. Lastly, pharmacists can explain the mechanism of action of medications to patients as well as work with prescribers to help eliminate duplication of therapy and avoid synergistic or antagonistic interactions. The pharmacist can support the patient and caregiver by providing additional insight on how the medication can be taken to avoid side effects or medication problems.

Pharmacists can assist patients in managing polypharmacy in various

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settings such as community practice, inpatient, long-term care facilities, and tele-pharmacy. Such management could include instituting medication reconciliation processes and comprehensive medication reviews through medication therapy management, disease state management, patient counseling, chronic care management, and other regimen review processes. Medication reconciliation creates the most precise list that is achievable regarding all prescription and nonprescription medications that the geriatric patient is taking. The process includes obtaining a medication history and reviewing pharmacy, ambulatory care, inpatient, and nursing facility records to ascertain new, discontinued, or revised medications. It also includes identification of medication discrepancies as well as communication and resolution of discrepancies with the patient and/or caregiver and providers (Mekonnen, McLachlan, and Brien, 2016). Medication reconciliation commonly occurs when the patient enters a new care setting, departs from a hospital or nursing facility, and is transitioning back to the community. Clinical Pharmacist-led medication histories as well as reconciliation for geriatric patients effectively address polypharmacy and reduce medication discrepancies as well as errors. Medication reconciliation is inextricably intertwined with medication safety. Although pharmacists have the most comprehensive training in medications, medication reconciliation is and should also be performed by nurses, medical assistants, physician assistants, and other health professionals.

Polypharmacy often causes geriatric patients to be exposed to medications that may increase the likelihood of the geriatric syndromes (i.e., that increase risk of falls, cause cognitive impairment, or adversely affect the blood pressure, vision, and other comorbid problems). Clinical Pharmacists can identify potentially inappropriate medications as another means of managing polypharmacy. Use of The American Geriatric Society's Beers Criteria® List was one of the first published lists to identify potentially inappropriate medications. The Beers Criteria® List guides pharmacists' systematic management of polypharmacy initiatives and it is evidence-based. Additionally, it includes, but is not limited to, medications that should typically be avoided in most older patients, medications that should be avoided in older patients with certain conditions, and medications that should be used with caution because of risks that may counterbalance benefits. Table 3 lists the Beers Criteria® and other tools that pharmacists use to identify inappropriate medications (Reeve, 2020). Some of these tools are designed for particular settings, like nursing homes, and have to be periodically updated with the approval of new drugs. Pharmacists should consider the side-effect profile of all medications, particularly those effects that cause sedation, constipation, or cognitive changes; lower the blood pressure; or otherwise affect organs like the liver, kidney, prostate, or eyes as potentially requiring cautious use or more intense monitoring in aging patients.

It has been established that inappropriate prescriptions are known to pose health risks for geriatric patients and should be removed or deprescribed from regimens as safely as possible. Unnecessary hospitalizations, unwanted pill burden, adverse effects, and increased financial expenditures are but a few consequences of not discontinuing the use of inappropriate medications (Hajjar et al., 2005; Halli-Tierney, Scarbrough, and Carroll, 2019). The pharmacist's role in deprescribing is essential to effectively address polypharmacy for older adults. The Bruyère Deprescribing Guidelines are integrated into the http://www.deprescribing.org website. These guidelines promote and evaluate deprescribing initiatives. They are based on the concept that deprescribing is the planned process of reducing or stopping medications that may no longer be advantageous or may be causing harm (Scott et al., 2015). The intent is to reduce medication burden or harm while improving quality of life. Some classes of medications, particularly the benzodiazepines (e.g., lorazepam, clonazepam, or alprazolam), require tapering to avoid rebound, discontinuation, or withdrawal symptoms. Other classes of medications that should be deprescribed to avoid these symptoms are listed in Table 4. Additional websites with information about deprescribing are provided by NPS Medicine Wise (https://www.nps.org.au/) and Better Practice (http://www.bpac.org.nz/).

Table 3 | Tools that Assist with Polypharmacy

Tools that Help Identify Inappropriate Medications	Tools for Nursing Homes	Tools for Minimizing Anticholinergic Burden
Beers Criteria®	The Assess, Review, Minimize, Optimize, Reassess Tool	Anticholinergic Risk Scale
STOPP	The Good Palliative-Geriatric Practice Algorithm	Drug Burden Index
PRISCUS	Patient Focused Drug Surveillance	
Medication Appropriateness Index	Geriatric Risk Assessment Medguide	
IPET (Canadian Criteria)		
FIT for the Aged Criteria		
Prescribing Indicators in Elderly Australians		

Through effective polypharmacy initiatives, clinical pharmacists can reduce the risk of complications for older adults who are transitioning between healthcare settings or providers and can reduce unplanned hospital readmissions and medication errors in those settings. Comprehensive medication management, medication reconciliation, medication self-management education and follow-up calls or visits are examples of strategies that clinical pharmacists utilize to successfully manage polypharmacy in geriatric patients whose care is being transitioned (Stranges et al., 2020). Since the risk of medication errors increases during transition of care, management of polypharmacy in those circumstances can help to mitigate that risk.

Pharmacists can also improve outcomes by addressing polypharmacy during Annual Wellness Visits (Ganguli, Souza, McWilliams, and Mehrotra, 2017; Hohmann, Hastings, Qian, Curran, and Westrick, 2020; Nelson, Modeste, and Gavaza, 2021; Osae and Rotelli, 2019). One of the primary ways pharmacists improve outcomes is that they assist the patient in setting smart priorities regarding medication use. Additional polypharmacy initiatives include update and review of patients' history, assessment of vital signs, screenings for risks, and establishing a list of their health care providers and medications. Pharmacists also utilize essential clinical screening tools to assess patients for sleep integrity, depression, anxiety, adherence, etc. Additionally, they perform population management and high-risk patient identification activities. In collaboration with the primary care team, pharmacists assess and manage high-risk patients. They also deliver safety services that include, but are not limited to, discontinuing medications when appropriate and identifying patients who require follow-up based on new initiatives pertaining to wellness, such as adherence.

Role of the Aging Life Care Professional®

Aging Life Care Professionals® (ALCPs) have numerous, important roles regarding prevention of polypharmacy. It is essential that ALCPs be proactive in these roles to assist in avoiding the harmful effects of polypharmacy in their clients. Table 5 lists some roles of ALCPs in preventing polypharmacy and how they favorably address polypharmacy.

Utilization of best practices and an interdisciplinary team approach by Aging Life Care Managers® are essential to managing polypharmacy in the geriatric population. Health-Care System Administrators and Medical Informatics Personnel are inextricably intertwined and essential to the success of the efforts of the Aging Life Care Managers and other health practitioners, and best practices relevant to those disciplines have been included (O'Daniel and Rosenstein, 2008; Sabine, 2006; Vaughn et al., 2006; Parand, Dopson, and Vincent, 2013; Mena-Carrasco et al., 2016). The literature is rich with documentation of the importance of the role of Medical Informatics in assisting with medication and health outcomes in aging individuals with the use of technology (Woll and Bratteteig, 2019; Slegers, Wilkinson, and Hendriks, 2013; Rantz et al., 2005; de Jong, van Leeuwen, and Schrijvers, 2016; Esterle and Mathieu-Fritz, 2013; Vimarland, Olve, Scandurra, and Koch, 2008; Mitchell et al., 2012; Went et al., 2011; Demaris, 2007; Koch and Hägglund, 2009; Haux et al., 2014).

Table 4 | Examples of Medications that Should be Deprescribed

CLASSES OF MEDICATIONS	EXAMPLES
Antidepressants	sertraline (Zoloft®), fluoxetine (Prozac®), mirtazepine (Remeron®), venlafaxine (Effexor®)
Benzodiazepines	Alprazolam (Xanax®), lorazepam (Ativan®), clonazepam (Klonopin®)
Antipsychotics	haloperidol (Haldol®), fluphenazine (Prolixin®), risperidone (Risperdal®), quietiapine (Seroquel®)
Beta Blockers	propranolol (Inderal®), metoprolol (Toprol®)
Anticholinergics	trihexyphenidyl (Artane®), benztropine (Cogentin®)
Anticonvulsants	carbamazepine (Tegretol® and others), valproic acid (Depakote® and others), and phenytoin (Dilantin®)
Antiparkinson Medications	pramipexole (Mirapex®), ropinirole (Requip®)

(Frank, C., & Weir, E. 2014)

Summary

Polypharmacy can be burdensome to the overall care of geriatric patients, and requires the patient, their caregivers, prescribers, pharmacists, and other health care professionals to know and execute their role in managing this burden to avoid negative therapeutic outcomes. Strategies such as medication reconciliation, deprescribing, and comprehensive medication reviews are a few strategies that can be employed to assist in improving outcomes for older adult patients. Simplifying medication regimens improves patient adherence and minimizes costly complications and unnecessary hospitalizations.

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Table 5 | Roles of Aging Life Care Professionals® in Addressing Polypharmacy

Assess risk and reduce relevant harm of medications through performance of holistic patient evaluations and benefit/risk analysis to produce use of the safest and minimal number of medication(s).
Provide education across the health-care continuum regarding the risks of potentially inappropriate medications (PIMs) and dangers of polypharmacy. (This raises awareness of topics that are critical precursors to favorable resolutions of polypharmacy.)
Use teach-back methods to ensure that patients know how to properly take their medications. Confirmation of this knowledge translates into excellent patient empowerment. Excellent patient empowerment is directly proportional to the effectiveness of polypharmacy resolution initiatives.
Sustain a sharp focus on and perform activities that can prevent Emergency Department visits. Ways to accomplish this include delivery of health-risk assessments as well as excellent clinical support, seamless healthcare management, remote patient monitoring, and virtual care.
Providers can use automatic polypharmacy alerts that prompt them to take therapeutic approaches and/or utilize interventions that produce favorable outcomes. For example, there is medication therapy management technology that proactively prompts patient-centric and comprehensive therapeutic approaches to prevent medication-related problems such as polypharmacy and adverse drug events.
Demonstrate safety values and practices to prevent harm to patients. Exemplify that safety is the fundamental belief that guides attitudes, choices, and actions in all activities. Demonstrate that safety is the core of the culture. Always embrace opportunities to incorporate practices that prevent and reduce risks, errors, and harm that can be attributable to medication.
Engage in continuous improvement based on learning from errors and adverse events.
Utilize effective mechanisms for continuous assessment of polypharmacy and planning for discontinuation of medications when appropriate. Interdisciplinary Aging Life Care / case management is an example.
Utilize effective mechanisms for learning and professional development. Obtain mentoring and participate in continuing education activities.
Improve quality of care through well trained staff members, utilization of appropriate medication(s), and patient engagement. Other initiatives include data collection and analysis regarding patient outcomes, optimizing access to care, and connecting and collaborating with other healthcare organizations.
Refine continuous process improvement throughout the healthcare system through ongoing evaluation and adjustment of goals.
Decrease the potential for adverse effects that are attributable to polypharmacy and/or potentially inappropriate medications by interviewing patients and/or their caregivers and reviewing all of the patients' health records.
Fulfill a leadership role regarding updates of relevant clinical practice guidelines. This role is a gateway to optimal prevention of polypharmacy through persuasion and influencing of clinical and management decisions across the continuum.
Lessen decompensation of systemic illnesses to minimize the number of medications needed to manage a patient.
Intentionally target and engage in effective interactions with interdisciplinary members and various hierarchical level staff members in ways that favorably transform medication prescribing practices.
Convert from aggressive care to end-of-life comfort care when indicated.

Table 6 | Best Practices for Health Care Providers Involved in Managing Polypharmacy

Prescribers	Pharmacists	Health-Care System Administrators	Health Informatics Team Members
Proactively utilize their scope of practice to integrate planned mechanisms that discontinue nonessential medications as well as medications that are potentially harmful, inappropriate, not indicated, or not necessary. Intuitively and objectively apply criteria that have proven value regarding resolution of polypharmacy and potentially inappropriate medication(s) in their decision-making processes. On various scales and under diverse circumstances, utilize practical, real-time bedside or ambulatory care methods that have proven to reduce polypharmacy risks and maximize safe use of medications. Combine clinical evidence with best practices to reduce polypharmacy risks and maximize safe use of medications. Leverage their clout to minimize patients' functional limitations and improve patients' health literacy and communication gaps. Leverage their role to reduce patients' symptom progression. Maximize their role to prevent occurrence of, or identify and manage, adverse effects. Promote wellness that has proven to prevent comorbidity(ies), thereby reducing the potential for accumulation of prescriptions due to comorbidities. Customize their assessments to prompt them to minimize the potential for occurrence of polypharmacy and potentially inappropriate medications. Order palliative care consult when indicated. Avoid conflict(s) of interest with pharmaceutical companies.	Sustain a proactive and systematic approach regarding all aspects of pharmacotherapy. Optimize high-reliability initiatives within all pharmacy practice settings. De-escalate medications when appropriate to mitigate risk and to enhance disease management, health outcomes, and quality of life. Set expectations and create standardized approaches that drive and optimize success regarding deprescribing of potentially inappropriate medications. Provide clinical practice guidelines regarding deprescribing nonessential medications during opportune instances. Utilize a holistic approach that includes education of patients, caregivers, and healthcare professionals; performance of real-time clinical interventions; research; and resource allocation. Sharpen their focus regarding the prevalence and dangers of polypharmacy. Maximize their engagement in activities that reduce medication errors, adverse drug events, and challenges with medication adherence that are attributable to polypharmacy.	Utilize their role to proactively create and sustain a safety culture that works towards creating a zero-harm-to-patients environment. This can be done by high-reliability organization initiatives that have proven successful in health-care systems. Create and sustain a just culture within the health-care system because it is a prerequisite to a high-reliability organization. Create a healthcare systems-based infrastructure that facilitates reduction of polypharmacy risks and maximizes safe use of medications. Empower clinicians by providing essential organizational resources. Incentivize activities that exemplify high-reliability organization principles, active engagement of core teams and commitment to patient safety. Engage in close and ongoing collaboration with interdisciplinary providers of the healthcare system. Publicly recognize healthcare system staff members who have proven themselves to be champions in reduction of polypharmacy risks and maximization of safe use of medications. Direct rapid process improvement workgroup activities when indicated.	Create effective medication deprescribing menu options in the healthcare system's medication database. Implement a polypharmacy reminder dialog template. Implement an electronic mechanism that proactively and purposefully screens patients' medical records for the presence of required, current laboratory assessment(s) when an order for a particular medication requires activation (e.g., the database prevents the medication order from being activated if a current requisite laboratory assessment is absent.)

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Angela Massey Hill, PharmD, CPh, RPh

Angela Massey Hill, PharmD, CPh, RPh is the Professor and Associate Dean of Clinical Practice at the USF Taneja College of Pharmacy. She joined the College in 2011 as the Founding Chair of TCOP's Department of Pharmacotherapeutics and Clinical Research. Dr. Hill has worked and consulted for community pharmacy practice, outpatient substance abuse treatment programs, and carved out specialty areas of practice to include, but not limited to geriatrics, psychiatry, neurology, alternative medicine, and substance abuse. She is the pharmacy consultant at the USF Health Neuroscience/Byrd Alzheimer's Institute where she is involved in comprehensive medication reviews, patient visits, drug-related research and community outreach. At the Neuroscience/Byrd Institute, Dr. Hill works closely with the Memory C.A.R.E. Center, & Movement and Disorders/Parkinson's Center, collaborates with clinicians on-scientific research, and speaks to groups of medical professionals, caregivers, and students. She also provides clinical services at Royal Sun Memory Care Assisted Living Facility and Reliance Medical Centers and is a consultant for Turning Point of Tampa. One of her duties as the Associate Dean of Clinical Affairs includes her serving as the project manager for WE-CARE, a community-based participatory research entity within the College of Pharmacy where she coordinates activities within the community to recruit, retain, and educate minorities on research participation.

Dr. Hill received her Doctor of pharmacy degree from Florida A&M University, received postgraduate training in the neurosciences, and holds a certificate in Medication Management.

Inez Victorian, PharmD, BCPS

Inez Victorian, PharmD, BCPS received her Bachelor of Science in Pharmacy from Xavier University of Louisiana and her PharmD from Mercer University. Dr. Victorian has attained Board Certification in Pharmacotherapy and the Medical Executive Credential. She has delivered polypharmacy management strategies for over fifteen years in federal healthcare systems. Foregoing roles include, but are not limited to, leadership in transition of care, medication therapy management and medication reconciliation. Dr. Victorian has also delivered academic service at Bilcare Research Academy of India and Symbiosis International University of India.

Age-Friendly Communities and Aging Life Care™: Opportunities for Partnership

Patricia Jacobs, BS, CMC and Althea Pestine-Stevens, PhD, MPAff

SUMMARY: Throughout the world, efforts are underway at the local level to respond to the needs of the growing older adult population, who largely wish to remain in their homes and communities. Age-Friendly Community Initiatives (AFCIs) are emerging as leaders in these efforts. AFCIs draw stakeholders from various sectors and professions within a community to effect improvements to the built, social, and service environments that will benefit older adults and persons of all ages. This article presents an overview of how AFCIs are situated within a community and highlights a case example in which an Aging Life Care Manager® (ALCM) initiated the development of an AFCI in a small town in the northeastern United States. Involving ALCMs as leaders and partners in an AFCI provides opportunities to enhance the AFCI's knowledge about the needs and availability of services for older adults, while also broadening the networks and increasing visibility of the ALCM.

Introduction

The aging of the baby boom generation, 75 million strong, is changing society. The oldest members of this cohort are turning 75 in 2021. By 2030, all Baby Boomers will be 65 or older, and by 2034 there will be more adults over 65 in the United States than children under 18 (United States Census Bureau, 2018). Needs for a built environment, services, and social engagement that will allow this large generation to age as they would like to – at home in their own communities – will become more and more imperative in the years ahead. In 2002, The World Health Organization began working with communities around the world to create awareness of, and responses to, the need for more age-friendly environments (WHO, 2018). Age-friendly initiatives in the United States, through the AARP Network of Age-Friendly State and Communities, began to be established in 2006. This movement is quickly growing both in the United States and abroad; as of June 2021, 1,114 municipalities, counties, states, and provinces have joined the World Health Organization's Global Network of Age-Friendly Communities (WHO, n.d.), and there are 564 municipalities in AARP's US network (AARP, n.d.).

Overview of Age-Friendly Community Initiatives

Age-Friendly Community Initiatives (AFCIs) are intentional, collaborative efforts to make localities better places for long lives by improving their social, built, and service environments (Greenfield et al., 2015). While the WHO recommends a "continuous cycle of improvement," which is a cyclical, iterative approach to implementing age-friendly efforts that includes assess, plan, act, and evaluate (WHO, 2018), there is no one model that AFCIs must follow in order for their community to be deemed "age-friendly." Some AFCIs follow a top-down approach, with leadership and direction primarily coming from local governmental leaders or directors of large non-profit organizations, while other are motivated by grassroots efforts and are led by lay community leaders and groups. AFCI efforts are highly local: Leaders choose their priority areas and plan their actions based on the needs of their specific community as identified through a survey of community members, available resources and capacities; input from partners, such as municipal department leaders, elected officials, and partner organizations; and advisory groups comprising older adult residents, partners, and a mix of the two.

As illustrated in Figure 1 (see page 19), age-friendly actions include improvements to the built (e.g., housing, transportation, and outdoor spaces), service (e.g., healthcare and community-based social services), and social (e.g., opportunities for civic participation, employment, transportation, social inclusion, and communications) environments. Their types of activities vary; AFCIs often employ a mix of strategies: implementing community events and programs, developing communications systems, embedding an age-friendly lens in other community organizations, and advocating to local authorities for age-friendly policies. In many of these target areas for focus, an Aging Life Care Manager's® attunement to the needs of older adults in the local community—as well as their

knowledge of the most up-to-date ways to address those needs—could be helpful for service and built environment improvement.

The Composition and Activities of AFCIs

This section draws from experiences with AFCIs in northern New Jersey, in particular a survey conducted in 2020, for examples of AFCI structures and activities (Pestine-Stevens et al., 2021). The eight AFCIs involved in this survey received grant funding starting in 2016 as part of a grantmaking program of two philanthropies in northern New Jersey: The Henry and Marilyn Taub Foundation and the Grotta Fund for Senior Care. For more information about these AFCIs and the regional network in which they participate, please visit www.agefriendlynj.org.

In general, each AFCI looks different in terms of leadership, structure, priorities, and activities. These initiatives can be housed within nonprofit organizations or governmental agencies or may be unaffiliated with an organization altogether. Some may have grant or organizational funding; others may have no fiscal budget. They may have paid staff or be run by volunteers. They may be formal organizations or informal teams. See Figure 2 (on page 20) for a depiction of priority areas AFCI areas may take on in a typical year.

While there may not be one model for AFCI structures and activities, researchers and practitioners have found a common thread among AFCIs: They are collaborative efforts. AFCIs are intersectoral collaborations, in that governmental, non-profit, and private business organizations as well as informal community groups are all involved as initiative leaders and partners (see Bryson et al., 2006 for more discussion on intersectoral or cross-sector collaborations). AFCIs are interprofessional collaborations, in that it is not only social workers or aging services professionals working on these efforts, but also those from healthcare, libraries, environmental interests, transportation, fitness and recreation, and other fields. Professionals are involved as leaders and partners (see D'Amour et al., 2005 for more discussion on interprofessional collaborations). Finally, AFCIs are communitywide collaborations, in that they focus on a particular geographic location and include relevant stakeholders within that locale. To illustrate the diversity of professional and sectoral representation, Figure 3 (see page 21) depicts the professional backgrounds of core team members from eight AFCIs in North Jersey.[1]

In addition to influential individuals and organizations within a community, AFCIs also often comprise groups that are responsible for oversight and action. A study in northern New Jersey recently found that each initiative had a combination of a core team of 1-5 individuals; advisory groups or steering committees, comprised either of professionals from partnering organizations, older adult residents, or a mix of the two; and more than half had task forces or work groups focused on a particular domain of age-friendliness

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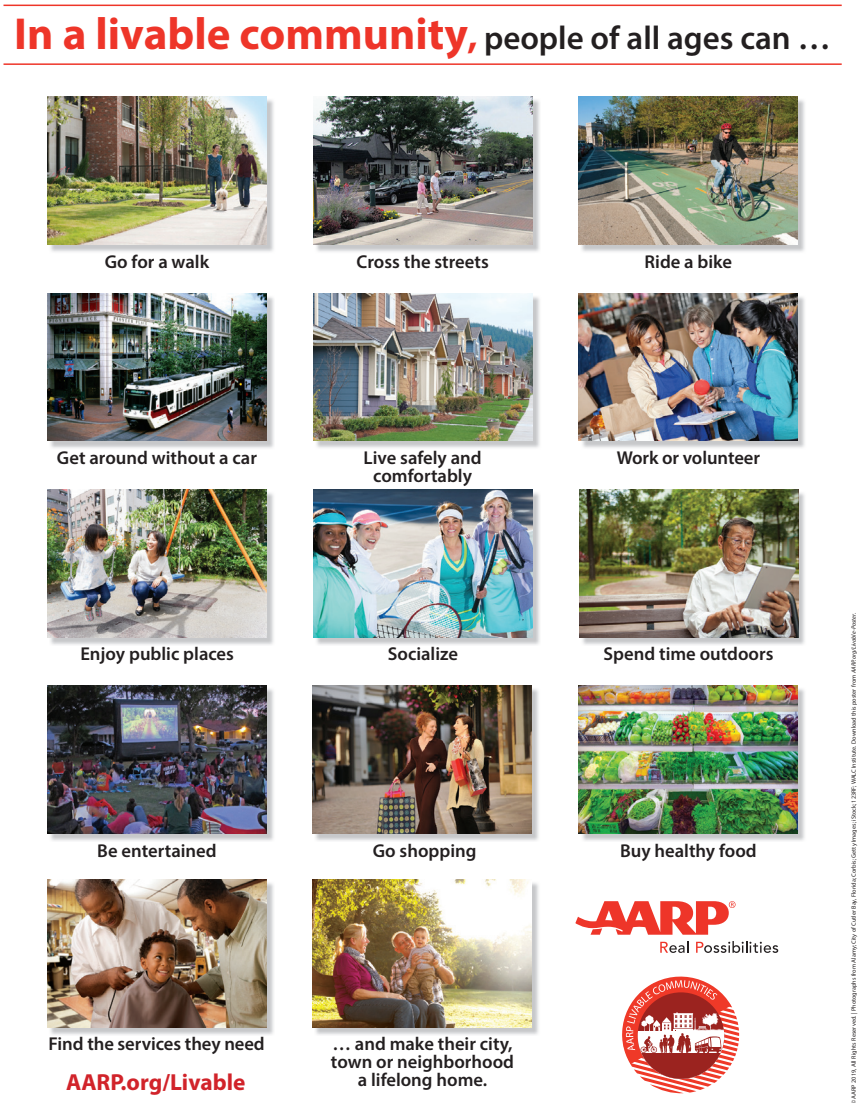
Figure 1 | Descriptions of a Livable Community

Source: AARP.org/Livable-Poster. Used with permission.



1. "Core team members," are individuals who are primarily responsible for moving forward the initiative as a whole and who meet and correspond regularly with each other as a group.

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(Pestine-Stevens et al., 2021).

Descriptive research studies have found certain community entities to be particularly important for including in AFCIs. For example, a study of age-friendly cities in Quebec found that steering committees comprising local elected officials, municipal departments, community organizations, associations of residents, as well as private and nonprofit organizations, were vital to initiative implementation, dissemination, and mobilization of key partners through "facilitating coordination and collaboration" (Garon et al., 2014, p. 77). Further, a fundamental part of what AFCI leaders in northern New Jersey describe as their activities and achievements, they describe in terms of their partnerships with other groups and organizations within the community (Pestine-Stevens and Greenfield, in press). These interorganizational relationships largely involve instrumental, linkage or connecting, and informational assistance, as well as "doing" activities together, such as planning and implementing community events and programs and attending other coalition meetings. AFCIs can be highly connected and invested with other organizations in their locality.

Aging Life Care Managers (ALCMs) can contribute their experience to the collective wisdom of these initiatives, whether as members of core teams, advisory groups, or task forces, or as representatives from partner organizations. They can offer not only their skills as listeners and volunteers, but their empathy and anti-ageism tools. They can amplify the voices of their clients and use their specialized skills to share knowledge about the processes of aging and the needs of older adults. In turn, the important role ALCMs can play in the lives of older adults will become more visible to coalition members. This visibility may lead to the identification of older adults who can benefit from a relationship with an ALCM.

The Appendix includes a description of the progress of an age-friendly initiative in its first year: New Providence-Our Community For All (in New Jersey, US). This example illustrates the first steps in the iterative process of age-friendly improvement the town began in 2020. An ALCM was the Executive Director of the nonprofit grant-funded effort. Her perspective was helpful to the group as it formed, conducted a town-wide Livability Survey, and undertook the process of becoming a designated Age-Friendly Community through both AARP and WHO.

For more examples of accomplishments of individual AFCIs around the world, see the WHO retrospective report (2018) as well as AARP's Livable

Figure 2 | Priority Areas of the Eight Inaugural Members of the North Jersey Alliance of Age-Friendly Communities

Source: Pestine-Stevens, A., Greenfield, E. A., Pope, N. E., & Scher, C. (2021). Age-friendly community initiatives in Northern New Jersey: Four years into grant funding (pp. 1–19). Rutgers University.

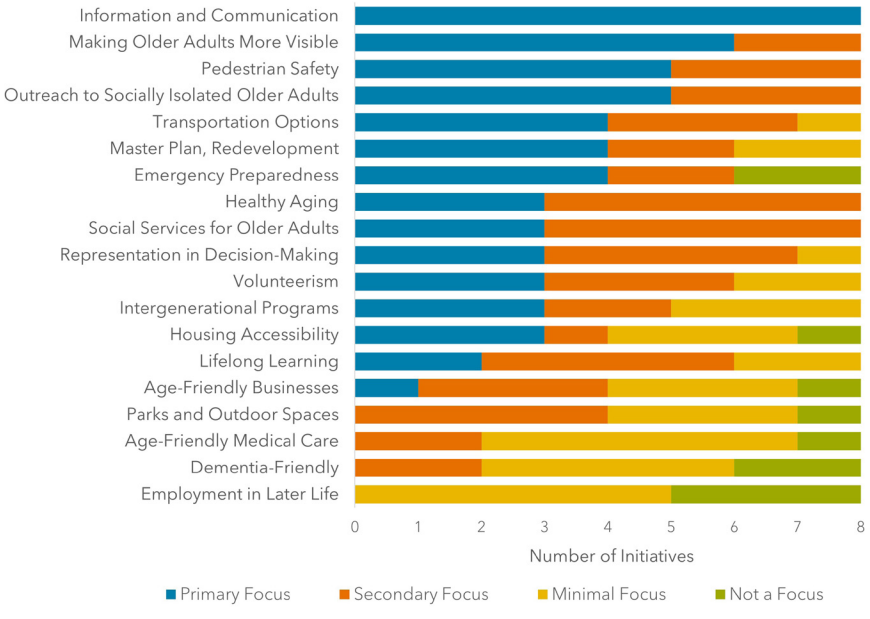
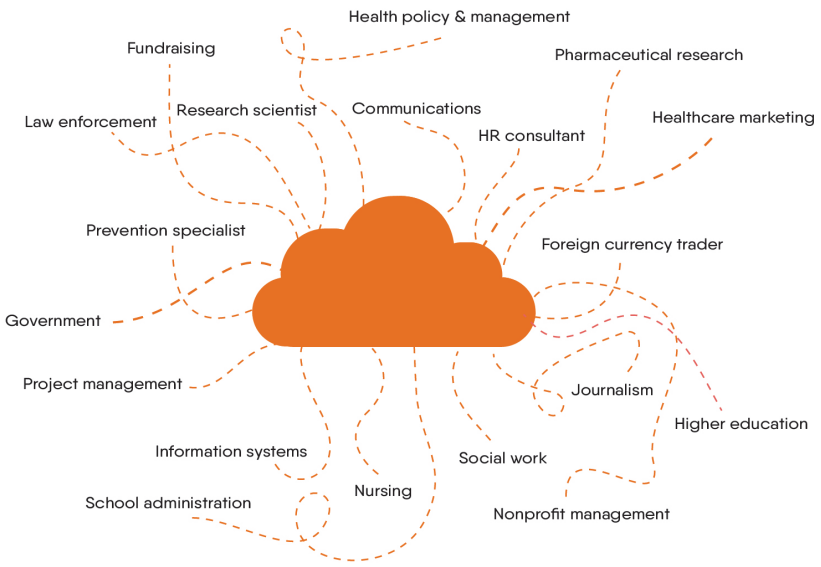


Figure 3 | Career Areas of Core Team Leaders from the North Jersey Alliance of Age-Friendly Communities

Source: Pestine-Stevens, A., Greenfield, E. A., Pope, N. E., & Scher, C. (2021). Age-friendly community initiatives in Northern New Jersey: Four years into grant funding (pp. 1–19). Rutgers University.



Communities Website (https://www.aarp.org/livable-communities). There is much an ALCM can contribute to this effort–and much that can be gained by partnering with the leaders of this necessary work.

AFCIs During the COVID-19 Pandemic

During the COVID-19 pandemic, many AFCIs continued to expand their networks and actions, pivoting their efforts to serve basic needs in their communities. AFCIs in northern New Jersey developed even more communications and collaboration systems to support their communities and their partners, amplifying each other's work, pioneering virtual programming, and filling in gaps with financial and instrumental resources when they could (Rutgers University School of Social Work, 2021). For more detailed examples of the COVID-19 responses AFCIs have participated in, see AARP's list of community responses during the COVID-19 pandemic: https://www.aarp.org/livable-communities/network-age-friendly-communities/info-2020/age-friendly-responses-to-COVID-19.html.

Aging Life Care Manager® Role

ALCMs can begin to explore the Age-Friendly Community Initiatives active in their areas by using the tools on the AARP Livable Communities webpages. A good place to start is the Network of Communities page, which can be found at https://www.aarp.org/livable-communities/network-age-friendly-communities/. Using the map of the U.S. on this page, it is possible to hone in on small areas to see what groups have formed that are local to an ALCM. An internet search for the name and location of the age-friendly initiative usually also brings up the initiative's contact information. The age-friendly designation application for each AFCI is also published on the AARP website, and contains useful information including the leadership of the initiative and the submitted action plan intended to meet local challenges.

Joining an age-friendly coalition or advisory group can connect an ALCM with other local leaders from many different stakeholder groups, all working toward helping residents age in community. The ALCM can offer new perspectives, and even provide formal training and group leadership, due to their knowledge of aging processes, the ALCM's specific disciplines, and the array of often highly local services available. This heightened visibility within a broad collaboration could create awareness throughout the town about the role an ALCM can play in an older adult's life. The partnership with others in a local community focused on aging issues will broaden the resource base for the ALCM, connecting them across disciplines to nonprofit and healthcare organizations, arts groups, and more. Partnering with other professionals facing similar challenges, from different perspectives and with different areas of expertise, will enrich the work of the ALCM, while also providing an opportunity to give back to their communities.

Conclusion

All over the U.S., communities are becoming aware of the demographic shift caused by the aging of the baby boom generation. Many are now prioritizing helping their residents age comfortable in the community. Aging Life Care Managers can add useful perspectives and important depth of knowledge about the needs of older adults into a town's Age Friendly Initiative. Connections made while participating in an AFCI can broaden the ALCM's knowledge of available services in the town, while simultaneously creating awareness of the value of Aging Life Care Management. ALCA members can find local age-friendly initiatives through the AARP website. The ALCM-AFCI partnership has potential to benefit older adults wherever it can be created.

Appendix: One Town's Age-Friendly Journey

Introduction to New Providence, New Jersey New Providence is a small suburban community in New Jersey, 20 miles from New York City, with a population of about 12,500 people. Fourteen percent of adult residents are currently over 75, and 29% of the town's adults are in the Baby Boom generation, now

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between 55 and 74 years old. The town has a median household income of $143,000 and a median home price of $574,000. Most homes are single-family. There are two small commercial districts in the three-square-mile footprint of New Providence.

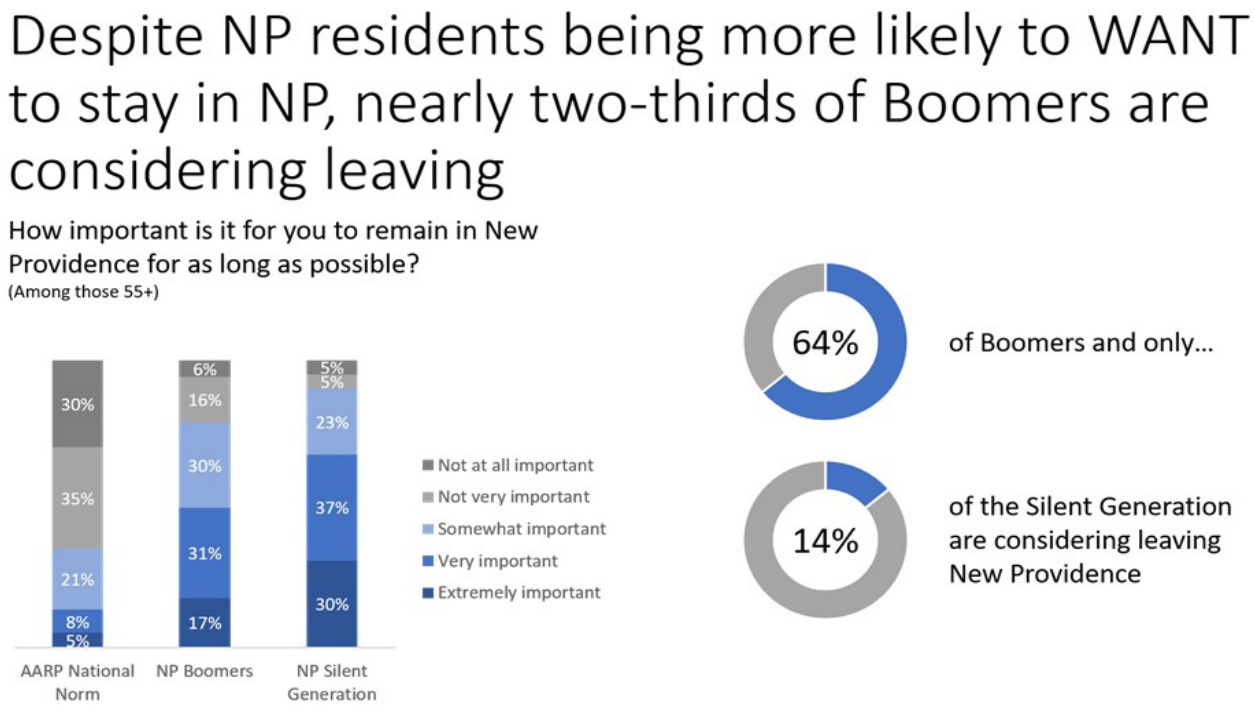
Founding the Age-Friendly Initiative In late 2019, the Economic Development Committee of New Providence decided to investigate the readiness of the town for the large demographic shift that would result from the aging of the town's largest generation. Aging Life Care Manager Patricia Jacobs spearheaded this effort. The town formed a small nonprofit, New Providence-Our Community For All (NP-OCFA) and applied for a grant from a local philanthropic organization, The Grotta Fund for Senior Care. NP-OCFA was awarded a grant of about $75,000 and joined a network of communities pursuing age-friendly initiatives in northern New Jersey. This one-year grant was largely directed at collecting data about how New Providence residents felt about their ability to age well in town.

Pivoting for Pandemic Response The arrival of the COVID-19 pandemic postponed the planned grant work of the group for six months. After consulting with the local Senior Center and Public Health Nurse to assess likely needs of older adults during the pandemic, NP-OCFA focused their efforts on basic needs, such as safe grocery shopping, as well as psychosocial needs, such as social connection and respect. NP-OCFA volunteers made it possible for older adults in New Providence to stay safely at home while also feeling connected to the local community. For example, the "Out Of Many, ONE!" flag project brought the community together while remaining distanced physically. As part of this project, members of the community of all ages were invited to decorate a free twelve-inch-by-twelve-inch fabric flag with images or words celebrating New Providence. NP-OCFA volunteers distributed and then collected the flags. A local girl scout troop attached the individual flags to thick webbing, creating long garlands. Group volunteers, girl scouts, and even the Mayor of New Providence joined in hanging the garlands like bunting on a large gazebo in the middle of town. Older adults joined in with children and middle-aged residents to create this display of town pride, uniting across generations as one community, despite the pandemic isolation in process.

Needs Assessment Pandemic numbers subsided in New Jersey over the summer of 2020. In October, using the Livability Survey available on AARP's website (AARP, 2019) as a template, NP-OCFA developed a survey to measure the age-friendliness of New Providence in various domains of community life, as perceived by its residents. All residents over the age of eighteen were invited to participate in this survey, which was advertised via mailed postcards (to all adult residents), posted on websites and social media, and with paper copies mailed to all residents over 70. This survey was available both online and on paper. More than 840 resi-

Figure 4 | Generational Differences in Planning to Remain in New Providence

Source: (NP-OCFA report)



dents completed the survey, which is about nine percent of the total adult population of the town.

Needs Assessment: Key Findings

A brief summary of key strengths and opportunities for improvement identified from this survey are detailed below; a more detailed summary of findings can be found at https://www.npocfa.org/projects (NP-OCFA, n.d.).

Survey respondents rated many categories very highly. Some categories emerged as particularly strong, as described by their percentage of "good," "very good," or "excellent" ratings. Categories with 90% or more positive responses included: the variety of healthcare professionals; well-trained healthcare providers; safe and well-maintained parks, homes, and public buildings; and free access to computers and internet in public places. Categories with 70%-89% positive responses included: availability of adult/assisted living facilities; trustworthy home modification and repair contractors; affordable fitness activities for older adults; and centralized information. In general, people expressed love and positivity for the town in the open-ended survey questions. In the words of one respondent: "New Providence is a nice place to live. Convenient to shopping—when I can do that again—and most everything I need. My children live near and that's important. The library is great and the place I visit the most."

However, some areas for improvement also emerged from survey responses. Less than 50% of respondents rated housing affordability for older adults, the availability of accessible housing in which to age in place, and the availability of local transportation as "good" or better. Further, although 100% of survey respondents indicated that they would like to age in their own homes, less than half of adults over age 70 rated New Providence as "good" for having accessible housing or affordable services for home modification, both of which could be interpreted as necessities for aging in the community. One resident said it well: "We live in a split-level house and are thinking that the time is coming [when] we should live in a house or unit all on one level. There are not many one-level options in New Providence sadly…My [other] main concern is the taxes and transportation once I cannot drive around to stores."

Generational differences were apparent in survey findings. According to their responses and depicted in Figure 4 (see page 22), residents in the Baby Boom generation (i.e., those 55-70 years old in 2020) are more at risk for leaving New Providence after retirement than the older generations. Although 80% reported that staying in New Providence was at least somewhat important to them, 64% of Baby Boom adults reported that they are considering moving away in their later years, compared with 14% from previous generations.

Respondents in the 55-70 age group also reported lower utilization and less-positive perceptions of the town's social and volunteer opportunities as well as parks and recreation amenities. Less than 12% of 55–70-year-old survey respondents attended any Senior Center events or programs, noting that most activities seem to be designed for individuals over 80 years. Programming in general in New Providence was perceived as being directed towards families with young children or individuals over 80 years. Respondents in this age group expressed interest in classes aimed at people with their level of education (more than 84% of respondents reported having a 4-year degree, and more than 47% reported having advance degrees), live music, the performing arts, and casual gatherings where they could make new friends.

Next steps

In April 2021, only a year after the age-friendly initiative began, the New Providence Borough Council voted to apply for an age-friendly designation from AARP and WHO. This visible commitment begins the process of making New Providence an even better place to age. The goal of every Aging Life Care Professional®: a high quality of life for every client; is in perfect alignment with this municipal effort.

Pilot programs are now underway by the municipality and aligned groups to address some of the opportunities presented by the Livability Survey data. Following are four examples of such pilot programs: First, the New Providence Library is designing pilot recreation programs with classes aimed at adults ages 55-70, with financial and volunteer support from NP-OCFA. Second, a Walk New Providence campaign is underway with NP-OCFA leadership and the support of the business community, to demonstrate the walkability of the downtown shopping and dining area. Third, a volunteer connection webpage was built by NP-OCFA volunteers and interns with substantial input from the Tricentennial Committee. This webpage is now available for older adults to access when seeking to connect with local volunteer opportunities. Fourth, older adults are being offered a scholarship to take an online driver safety class with full endorsement by the New Providence Police Department.

For longer-range focus, the New Providence Planning Board is reviewing ordinances to assess opportunities for changes to housing stock that would be accessible to people of all ages and abilities. Additionally, a committee including adults of all ages is forming under the leadership of the town's Activities Department to advise town leadership on programming they would find helpful as the department builds a five-year Activities Master Plan.

Creativity and persistence will be needed to address all the opportunities presented by the needs assessment survey data. A variety of voices, including ALCMs, should inform the combined work of the age-friendly coalition to advocate for built environment changes as well as service modifications to meet the needs of aging adults. The next step after being recognized as an AFCI by AARP is to write an age-friendly action plan that addresses community challenges in an ongoing way, and Aging Life Care perspectives will be highly valuable in this effort.

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Patricia Jacobs, BS, CMC

Executive Director, New Providence-Our Community For All
360 Elkwood Avenue, New Providence NJ 07974 | 732-535-8441
newprovidenceocfa@gmail.com

Patricia Jacobs is an Aging Life Care Manager in New Providence, NJ. She founded and directs an age-friendly nonprofit, New Providence-Our Community For All, with grant funding from the Grotta Fund for Senior Care, an Advisory Fund at the Jewish Community Foundation of Greater Metrowest New Jersey. Ms. Jacobs worked for two decades as an Executive Director for large senior living organizations in Virginia, Texas, and New Jersey. She is a Certified Care Manager by the National Academy of Certified Care Managers, a Certified Aging in Place Specialist by the National Association of Home Builders, and a Certified Cohousing Group Facilitator. Ms. Jacobs earned a bachelor's degree from the College of William and Mary in Virginia in Learning and Memory, and a Graduate Certificate in Leading Change from Cornell University. Ms. Jacobs and Dr. Pestine-Stevens work together as participants of the North Jersey Network of Age Friendly Communities, of which New Providence-Our Community For All is a member.

Althea Pestine-Stevens, PhD, MPAff

Postdoctoral Associate, School of Social Work at Rutgers,
The State University of New Jersey
120 Albany St, Tower One – Suite 200, New Brunswick, NJ 08901 | 847-867-2606
Althea.ps@rutgers.edu

Althea Pestine-Stevens is a Postdoctoral Associate at Rutgers University School of Social Work, where she coordinates research, evaluation, and professional development activities for and with the North Jersey Network of Age-Friendly Communities. She also teaches a course on aging services to Master of Social Work students. She received her PhD in Social Welfare from the University at Albany, State University of New York in 2019 with a mixed-methods dissertation on mapping interorganizational relationships in an age-friendly county initiative. She also received a master's degree in Public Affairs from the LBJ School of Public Affairs at the University of Texas at Austin, with a portfolio in nonprofit studies. Her primary interests include community gerontology, interorganizational collaboration, and teaching anti-racism in gerontology classrooms.

Bladders Matter – Help People Speak Up!

Annemarie Dowling-Castronovo, PhD, RN, GNP-BC, ACHPN

ABSTRACT: More than 33 million people in the United States experience urinary incontinence. Aging Life Care Managers® (ALCMs) are in a unique position to share evidence-based information about urinary incontinence (UI) with aging adults and their families. This article is primarily based upon a published evidence-based protocol that will provide ALCMs with an overview of the assessment and management of UI that will enable them to better serve their clients. Key resources to share with clients and families are presented.

Background

Over a decade ago, Whoopie Goldberg humorously endorsed an absorbent product to try to destigmatize bladder leaks – or the "spritz," as she called them (Newman, 2010). Other celebrities, such as Stephen King and Marie Osmond have shared their experiences with urinary incontinence (UI) (Elgin, 2018). Meanwhile, scholars have debated about theoretically and operationally defining UI. Definitions have included the involuntary loss of urine sufficient to be a problem (Fantl et al., 1996); involuntary loss of urine (National Association for Continence [NAFC], 2021); or the complaint of involuntary urine loss (Abrams, et al., 2003). However, older people do not complain or speak up (Dowling-Castronovo, Long, and Bradway, 2021). A recent conceptual analysis offers a holistic definition of UI:

> Involuntary loss of urine to a place that is socially unacceptable that results in significant impacts on activities of daily living, quality of life, and physiological and psychological aspects of culturally situated notions of health. (Zhang, 2018, p. 6)

Across the healthcare continuum, prevalence rates for UI are as high as 70%, with more than 33 million people in the United States reporting UI (NAFC, 2021). Despite mounting evidence about preventative, conservative, pharmacological, and surgical treatments for UI, the extent to which research findings have translated into routine health care practices is unknown. Aging Life Care Managers® (ALCMs) are in a unique position to learn and share evidence-based information with clients and families, empowering them about what to expect from health care providers. This article will provide ALCMs with an overview of the assessment and management of UI that is primarily based upon a published evidence-based protocol (Dowling-Castronovo, Long, and Bradway, 2021). In addition to the information in this article, ACLMs should explore credible resources to share with their clients and families. See Resource Box.

Risk Factors and Consequences

Although people of all ages experience loss of bladder control, UI is more prevalent among older people and those in institutions. UI has been found to share relationships with other geriatric syndromes: delirium, falls, and insomnia. Therefore, assessment for common risk factors – such as impairments in cognition and function – is important (Luo et al., 2015; Vaughan et al., 2018). Other factors are listed in Table 1. However, UI is *not* a normal part of aging – that is, not a part of *healthy* aging.

UI has been associated with falls, fractures, pressure injuries, urinary tract infections, blood stream infections, depression, poor quality of life, social isolation, loss of function, and decreased quality of sexuality. Care should be taken to not view these associations as causes of UI. Many factors are often involved. However, a few examples help to illustrate. For example, a systematic study of men with lower urinary tract symptoms (LUTS) found that men with urge UI were at greater risk of falling (Noguchi, Chan, Cumming, Blyth, and Naganathan, 2016). Clinically this makes sense, as people with urge UI often rush to the bathroom to "make it in time" and in their haste – fall. Older adults often have atypical presentations of illness, such as experiencing UI as a symptom/sign of urinary tract infections, which, if left untreated, may lead to urosepsis.

Varied methodological studies have placed the economic cost of UI in the billions. Costs include absorbent products, provider visits, diagnostic testing, pharmaceuticals, treatments (such as surgery, Onabotulinumtoxin A, and sacral neuromodulation), as well as loss of work wages. The quality of life of family caregivers of people with UI is also negatively affected. as providing care for older adults who are incontinent is isolating and burdensome (Santini, Andersson, and Lamura, 2016). ALCMs who support caregivers likely provided important recognition for the caregivers' work that promotes human dignity. In the Resource Box, there is a link for the *Family Caregiver Alliance* that offers helpful resources. For older people, UI is a marker of frailty, a predictor of mortality, and a risk factor for institutionalization.

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Table 1 | Additional Factors Associated with Urinary Incontinence

- Older age
- Caffeine intake
- Treatment of cervical and endometrial cancer, including radiation therapy and hysterectomy
- Immobility/functional limitations
- Impaired cognition/confusion/delirium
- Overweight/Obesity
- Sedentary lifestyle
- Smoking
- Constipation, fecal impaction, fecal incontinence
- Malnutrition
- Depression/depressive symptoms
- Pregnancy/vaginal delivery/episiotomy; Large birth weight of baby
- Treatment of prostate cancer, including radical prostatectomy and radiation therapy
- Hearing and/or visual impairment
- Heart failure
- Low fluid intake
- Environmental Barriers
- High-impact physical activities (e.g., gymnastics)
- Multiple comorbidities
- Diabetes mellitus
- Parkinson's Disease
- Stroke
- Chronic Obstructive Pulmonary Disease
- Estrogen depletion
- Pelvic muscle weakness, prolapse
- Childhood nocturnal enuresis, adverse childhood events
- Institutionalization prior to hospitalization
- Arthritis and/or back problems
- Menopause

Adapted from Dowling-Castronovo, A., Long, J., & Bradway, C. (2021). Urinary incontinence in the older adult. In Boltz, M., Capezuti, E., Fulmer, T. & Zwicker, D. (Eds.), Evidence based geriatric nursing protocols for best practice (6th ed., pp. 437-464). New York, NY: Springer Publishing.

Bladder and Pelvic Floor Health

A healthy bladder and pelvic floor imply overall health. Raising awareness about evidence-based treatments for UI should consider bladder and pelvic floor health. A transdisciplinary group, The Prevention of Lower Urinary Tract Symptoms [PLUS] Consortium, has been increasing public awareness about UI and other LUTS among girls and women. The foundational work of PLUS defines bladder health as:

> A complete state of physical, mental, and social wellbeing related to bladder function and not merely the absence of LUTS. Healthy bladder function permits daily activities, adapts to short-term physical or environmental stressors, and allows optimal well-being (e.g., travel, exercise, social, occupational, or other activities). (Lukacz et al., 2018, p. 978)

As the bladder is encased in the pelvis, the term "pelvic floor health" has been gaining attention. This term is more common in the public web-based domain than in academic literature. Web-based information was categorized into two groups: non-profit professionals and consumer support groups; both with advertisements. The academic literature addressed the time period of pregnancy and birthing, while medical literature focused on pelvic floor dysfunction, and nursing and midwifery literature centered on women's experiences, knowledge and empowerment. Pelvic floor health refers to:

> The physical and functional integrity of the pelvic floor unit through the life stages of an individual (male or female), permitting optimal quality of life through its multifunctional role and where the individual possesses or has access to knowledge, which empowers the ability to prevent or manage dysfunction (Pierce, Perry, Gallagher, and Chiarelli, 2015, p. 999).

ACLMs who learn about recent advances in bladder and pelvic floor health should feel motivated to learn about preventing and treating UI.

All Leaks Are Not the Same

There are generally two categories of UI: transient and established.

Transient UI

Transient UI typically occurs somewhat suddenly. Older people should be encouraged to speak to their health care providers to determine underlying causes and degree of reversibility. The mnemonic TOILETED addresses common causes; see Table 2. Of note, hospitalization is a time when older people are likely to develop transient UI. These cases have also been called new-onset UI, hospital nosocomial UI, and hospital-acquired UI. Shorter hospital stays and competing priorities likely result in older adults being discharged without resolution of transient UI. Therefore, greater attention is needed to prevent transient UI, or at very least implement strategies to reverse UI and prevent reoccurrences.

Established UI

Established UI, or chronic/persistent UI, may occur suddenly, as in the case of spinal cord injury, or occur gradually. Common types of established UI are stress, urge, mixed, overflow, and functional UI.

Stress UI is an involuntary loss of urine during activities that increase intra-abdominal pressure, such as laughing, coughing, or changing positions. Typically, small amounts of urine are lost. Although this type is more common

Table 2 | Toileted

- **T** Thin epithelial lining (atrophic vaginitis)
- **O** stool Obstruction (constipation)
- **I** urinary tract Infection
- **L** Limited Mobility
- **E** Emotional (psychological, depression)
- **T** Therapeutic medications (pharmacological)
- **E** Endocrine conditions (diabetes)
- **D** Delirium

Adapted from Dowling-Castronovo, A. (2018) Try this: Best practices in nursing care to older adults. Urinary incontinence assessment in older adults: Part I – transient urinary incontinence. In S. Greenberg (Ed.), Try this: Best practices in nursing care to older adults. Issue 11.1. John A. Hartford Foundation Institute for Geriatric Nursing. https://consultgeri.org/try-this/general-assessment/issue-11.1

among women, men may experience stress UI after prostate surgery.

Urge UI, also known as detrusor instability or wet overactive bladder, is an involuntary loss of urine that occurs when there is a strong urge to void. "Key in the lock" is a common phrase among people with urge UI, who describe an urgency so strong that, upon arriving home and putting the "key in the lock," cannot control the urge to urinate and leak. Other signs and symptoms of urge UI include urinary frequency, nocturia, enuresis, and urine leakage of moderate to large amounts. Bladder changes common in aging make older adults particularly prone to this type of UI.

Mixed UI is defined as involuntary urine loss typically with mixed features of stress and urge UI, but may include others, such as functional UI.

Overflow UI is an involuntary loss of urine when the bladder becomes over-distended. This may be the result of an underactive detrusor muscle with conditions that negatively affect neural innervations, such as prolonged diabetes mellitus; or, with bladder outlet obstruction, such as benign prostatic hyperplasia. Signs and symptoms typically include dribbling, urinary retention or hesitancy, urine loss without a recognizable urge, an uncomfortable sensation of fullness or pressure in the lower abdomen, and/or incomplete bladder emptying.

Functional UI is caused by factors outside the genitourinary system. Impairments of the body and/or mind may result in a person being unable to independently perform self-toileting actions in order to urinate in a socially acceptable receptacle. For example, during hospitalization, older adults experience acute illnesses in a strange and stressful environment. As a result, voiding and toileting become more complex. They depend on hospital staff to facilitate continence. In other settings, older adults who are frail may depend on others to get them to the toilet in time.

Assessment

ACLMs are well-positioned to coach their clients in how to talk about this taboo topic, teach them what to expect from providers, and follow up with them about how to achieve the best outcomes. While there are evidence-based assessment tools (https://hign.org/consultgeri-resources/try-this-series), ACLMs may use general questions, such as "Have you ever leaked urine?" "Is it new or old?" and "How much does it bother you?" Upon learning that a client does have UI, encourage them and their family to have an evaluation. General providers should be able to perform a basic assessment for someone with UI. However, UI often requires an interdisciplinary approach. To achieve the maximum degree of bladder control, people may need to seek out providers in various specialties, including gynecology, urology, urogynecology, gastroenterology, physiotherapy, and pharmacology. Health care providers will ask about history while being alert to risk factors. ACLMs should familiarize themselves with providers in their area who specialize in evaluation and treatment of UI in order to best guide clients. Since a bladder diary must be part of the assessment, patients will benefit from having ACLMs show them how to complete this focused assessment tool.

ACLMs who help clients to complete a bladder diary will be allowing them to practice communicating to health care providers about having their bladder needs addressed. There are various versions available. Some versions may include voided volumes and timing of voiding durations. Essentially, diaries should capture daily information about the number of voids, number of accidents and their associated activities, number of bowel movements, and the types and amounts of fluid intake. Studies have evaluated the use of a diary for as little as one day to as many as seven days. An example may be found in the Resource Box. For ALCMs who do not have experience with these diaries, completing a diary for oneself provides insights into how to best partner with clients. ALCMs might want to include a bladder diary in client educational materials, and a simple informational flier they can create based upon information from this article and the Resource Box about UI and bladder health. ALCMs will need to lead these discussions, knowing that people with low health literacy will benefit from additional support.

While a comprehensive gero-assessment is essential, a focus on abdominal, genital, rectal, and skin examinations is also expected. For example, having the patient void prior to the exam will allow the provider to generally assess cognition and function; subsequently, if suprapubic tenderness and dullness is noted during palpation and percussion of the abdomen, then overflow UI becomes the leading differential diagnosis. Genital exams may reveal phimosis of the penis or pelvic organ prolapse. Postmenopausal changes may result in atrophic vaginitis with notable perineal inflammation with tenderness, or thin pale genital tissues. Women should be

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instructed to cough or perform the Valsalva maneuver to objectively assess for stress UI. A digital rectal exam will provide data about constipation, and, for men, assessment of the prostate gland.

Since diabetes and urinary tract infections are examples of conditions associated with UI, basic diagnostic tests include blood tests and urinalysis. More detailed assessments include post-void residual urine measurements, a pad test, and/or urodynamic testing. Environmental assessments should address barriers, such as fall hazards, and facilitators, such as bedside commodes to facilitate toileting needs. ACLMs must consider socio-ecological influences and competing interventions in treatment care plans.

Strategies to Control the Flow: Interventions for UI

People with UI seem to prefer self-help strategies they learn from public media and people in their social networks rather than from health care professionals. Yet people want help, and need help, to control UI. For decades, leaders in this area, such as nurses, nurse practitioners, urologists, urogynecologists, physical and occupational therapists, have been working to create environments that encourage people with UI to speak up and seek help. More recently, leaders have been focusing on the prevention of UI and other LUTS, such as urinary frequency, urgency, and nocturia, to name just a few. ACLMs guide and coach clients and their families through complex health care information. ACLMs who learn and include evidence-based information about UI and bladder health will likely improve the lives of their clientele and increase the value of their services. Providing strategies for controlling UI and promoting bladder health requires an understanding of the types of UI, expectations of assessment, and available interventions.

Although the science to prevent UI and other LUTS is in its infancy, experts agree that keeping body mass index (BMI) in healthy range, drinking adequate amounts of water, exercising the pelvic floor muscles and the whole body, and avoiding prolonged time periods of holding urine all contribute to a healthy bladder (Smith et al., 2021). Other healthy bladder behaviors include toileting schedules, mind over bladder exercises, bowel routines, and smoking cessation, which, together with pessaries for women and pharmacological therapy, make up the first-line treatments for UI. Motivation and therapeutic trusting relationships are essential ingredients for success. Advanced treatments include electrical stimulation, urethral plugs, and various surgical options. This article focuses on first-line treatments for UI.

Healthy BMI, Diet, and Fluid Management

A healthy BMI is from 18.5 to 25. People should be encouraged to know their BMI. See Resource Box.

While the exact mechanisms are not fully understood, caffeine and alcohol are associated with UI. Both affect regulatory pathways and have a diuretic effect, resulting in urinary urgency, frequency, and leakage. Other foods and drinks, such as carbonated beverages, artificial sweeteners, and acidic foods/fluids have also been cited as bladder irritants. In contrast, individuals with adequate intake of Vitamin D have fewer episodes of UI. Due to variation of individual responses, people should educate themselves about bladder irritants and bladder-friendly foods, track food and fluid intact along with their bladder diaries, and, with the help of professionals, identify individual patterns that may be open to targeted intervention to improve UI (Burgio, Newman, Rosenberg, and Sampselle, 2013).

The USDA recommends that adults drink 6-8 glasses (approximately 25–30 ml/kg) of water per day. Nevertheless, individuals with UI typically limit their fluid intake, which, in turn, results in concentrated urine that irritates the lining of the bladder. Timing of fluid intake matters; older people should avoid fluid intake before bedtime to lessen the chances of nocturia, since some medical conditions, such as heart failure, predispose them to nocturnal polyuria (Burgio et al., 2013). *Hydrate for Health* serves as an example of an evidence-based educational project that incorporated the voice of older people (Palmer et al., 2014).

Exercise

An individualized physical activity plan should address overall physical conditioning while targeting pelvic floor muscles. Pelvic Floor Muscle Exercises (PFMEs), also known as the *Kegel Exercise*, may be verbally taught. The provider tells the person to contract the rectal or vaginal muscles without contracting the abdominal, gluteal, or thigh muscles. Ideally, education about PFMEs occurs during a vaginal or rectal examination when the provider tells the patient to contract their muscles around the gloved examination finger, allowing for an initial assessment of strength and endurance. Provider feedback about this assessment allows the patient to better identify and isolate the correct muscle group. Across research studies, there has been no set exercise "dose." Typically, 15 repetitions three times a day should result in improvement in about one month.

Evidence supports the benefit of therapeutic coaching done by specialists, such as nurses and therapists, who specialize in pelvic floor therapy. These specialists incorporate special stretching techniques, massage, and trigger point therapy. Some people may benefit from performing PFMEs with biofeedback therapy under the supervision of a specialist who may also suggest a home biofeedback regimen. Under a specialist's care, some women may benefit from using graduated vaginal weights during PFME.

Toileting Schedules

Normal voiding should occur every 3-4 hours, in a relaxed position so that the pelvic floor muscles are not tense, and with adequate time to allow emptying of the bladder (Burgio et al., 2013). Gray (2000) provides detailed voiding physiology. In addition, a conceptual analysis led to a theoretical framework illustrating the factors involved in voiding among girls and women to guide research, practice, and education about how to promote healthy voiding (Wang & Palmer, 2010). A variety of toileting schedules exist that address the frequency and behavior of how people with UI

may optimize bladder control.

Common names of toileting schedules include: individualized toileting programs, scheduled toileting programs, timed voiding, prompted voiding, and bladder training/retraining programs – all with varied reports of success. Ideally, the bladder diary provides information about the patterns of voids, accidents, and associated behaviors. The information is used to determine the best toileting schedule. For example, the diary of a frail older person dependent on caregivers reveals the following. At 0915 the person consistently attempts to independently void or is incontinent. With this information, the toileting time should be 0830 to 0900 and the caregivers should prompt or ask/offer assistance to the toilet and praise them for success. ACLMs can help their clients identify these patterns and reinforce individualized scheduling.

Toileting requires an environment that promotes continence. Maintaining an active lifestyle requires knowing where to "go." There are apps for smartphones that help people locate bathrooms. See Resource Box. In addition to bathroom access, older people may be "dependently continent" in that they require adaptive devices and/or caregivers to control their bladder. Details, such as height of toilet seats and use of commodes and/or urinals, need to be individually addressed. Occupational and physical therapists may offer individualized strategies.

Mind Over Bladder Exercises

Although the mechanisms for how mind exercises are not fully understood, they are important strategies for maintaining bladder control. Cognitive therapy and mindfulness have decreased the numbers of UI episodes, with people expressing satisfaction (Dowd, Kolcaba, and Steiner, 2000; Long, Khairat, Chmelo, and Palmer, 2018; Schirm, Baumgardner, Dowd, Gregor and Kolcaba, 2004), and may be used together with urge inhibition and individualized toileting schedule. Urgency inhibition has also been called the urgency drill and urgency suppression (Hill, 2016). For example, the bladder diary of a person with urgency UI may reveal voiding every hour with five episodes of UI a week. To practice better mind over bladder control, this person may lengthen the time between voiding by initially extending the time to every hour and a half. When an urge to void occurs before it is the scheduled time to void, the person uses an urge inhibition strategy. Strategies include distraction techniques (e.g., a song/prayer), relaxation techniques, and/or a few rapid PFMEs known as "quick flicks." A practiced cognitive strategy may also help, such as "If I feel like I am going to have some leakage, I say to myself 'Not now, later.' I will calmly proceed to the toilet." (Schirm et al., 2014, p. 304)

Bowel Routine

The prevention and treatment of constipation also help with bladder control. Colonic massage and using a footstool during defection are two methods to help manage constipation and improve UI (Hill, 2016). Colonic massage, or abdominal massage, uses the fingers to massage across the abdomen slowly and circularly, following the anatomy of the colon. Placing feet on a stool while leaning forward enables better body alignment to avoid straining and facilitates emptying of the bowel during toileting. Scheduled toileting, adequate fluid, dietary fiber intake, and physical activity, as individual limits allow, also support healthy bowel routines.

Smoking Cessation

Not only is smoking carcinogenic, its effects on the pulmonary system lead to chronic coughing, which contributes to stress UI.

Pessaries

Some women experience stress UI associated with pelvic floor prolapse, also referred to as pelvic organ prolapse. Signs and symptoms include vaginal bulging, pelvic pressure, and low back discomfort/pain. For women who are not candidates for surgery, or decline surgery, a pessary may be suitable. Made of medical grade silicon, these ring- or cube-shaped devices support the pelvic organ and may improve UI. Trained providers evaluate and fit a woman with the proper sized pessary, as well as educate about its use (Atnip and Dell, 2012).

Pharmacological Therapy

Medication therapy for UI can be categorized by UI type. For example, antimuscarinic drugs, such as oxybutynin, relax the bladder and are FDA-approved for the treatment of urge UI and OAB. For older adults, it is important to consider the side effects of these drugs, including dry mouth and constipation, and the fact that there may be a link between these drugs and conditions that affect cognition. These drugs should be started as single therapy at the lowest possible dose. Also FDA-approved is mirabergron, a beta-3 agonist. For adults needing diuretic therapy, older people should be encouraged to talk to their prescribers about the best dosing schedule in order to avoid nocturia, sleep disturbances, and increasing risk of falls. People with UI should explore pharmacological options with prescribers familiar with treating UI. As with any medications, the unique features of older adults and the avoidance of polypharmacy must be considered (Rich, 2021).

Concluding Thoughts

Understanding what is known about UI reveals that it is no longer just a quality-of-life issue. This condition sheds light on a person's overall health, with consequences not only for them, but for their caregivers as well. People with UI need ACLMs to keep in mind that assessment and management of UI is complex and highly individualized. ACLMs should consider the individual characteristics of the older person with UI. This requires learning how their clients deal with UI, to what extent UI bothers them, and how can they be motivated to learn strategies to improve bladder control. ACLMs guiding and coaching clients with UI must mutually define outcomes to be realistic. Some people may never reach complete bladder control and will need ACLMs to guide them in the selection of absorbent and skin products. However, with the right coach and interdisciplinary approach, it is possible to minimize the number of UI episodes.

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Resource Box

Bladder diary

https://www.niddk.nih.gov/-/media/Files/Urologic-Diseases/diary_508.pdf

BMI calculator

https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm

Family Caregiver Alliance

https://www.caregiver.org/resource/caring-someone-incontinence-emotional-and-social-issues/

Hartford Institute for Geriatric Nursing

https://hign.org/consultgeri/resources/protocols/urinary-incontinence

National Association for Continence (NAFC)

www.nafc.org

National Institute of Diabetes and Digestive and Kidney Diseases

https://www.niddk.nih.gov/health-information/urologic-diseases/bladder-control-problems/diagnosis

The Prevention of Lower Urinary Tract Symptoms [PLUS] Consortium

https://plusconsortium.umn.edu/

The Simon Foundation for Continence

https://simonfoundation.org/

World Federation for Incontinence and Pelvic Problems (WFIPP) Support in Continence

https://www.supportincontinence.org/

Urology Care Foundation

https://www.urologyhealth.org/educational-resources?product_format=466|&language=1122|

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Annemarie Dowling-Castronovo, PhD, RN, GNP-BC, ACHPN

Jonas Nurse Leader Scholar 2008-2012, Associate Professor
Evelyn L. Spiro School of Nursing, Wagner College
One Campus Road, Campus Hall Rm 316
Staten Island, New York 10301
917-239-0841 (cell) | Dowling.castronovo@wagner.edu.

Annemarie Dowling-Castronovo has practiced as a staff nurse and a gerontologic nurse practitioner (GNP) in a variety of settings including an outpatient continence program, and is currently a GNP on the Palliative Care Team at Staten Island University Hospital, Northwell Health. In addition, she is an Associate Professor in the Evelyn L. Spiro School of Nursing at Wagner College, where she integrates evidence-based practices for the care of older people in undergraduate and graduate nursing courses. Her dissertation revealed the Grounded Theory of Regaining Control, illuminating how older people respond to new-onset urinary incontinence during hospitalization. She has published about urinary incontinence and is currently a member of the editorial board for Urological Nursing Journal. Most importantly, she practices healthy bladder behavior skills because – they work.

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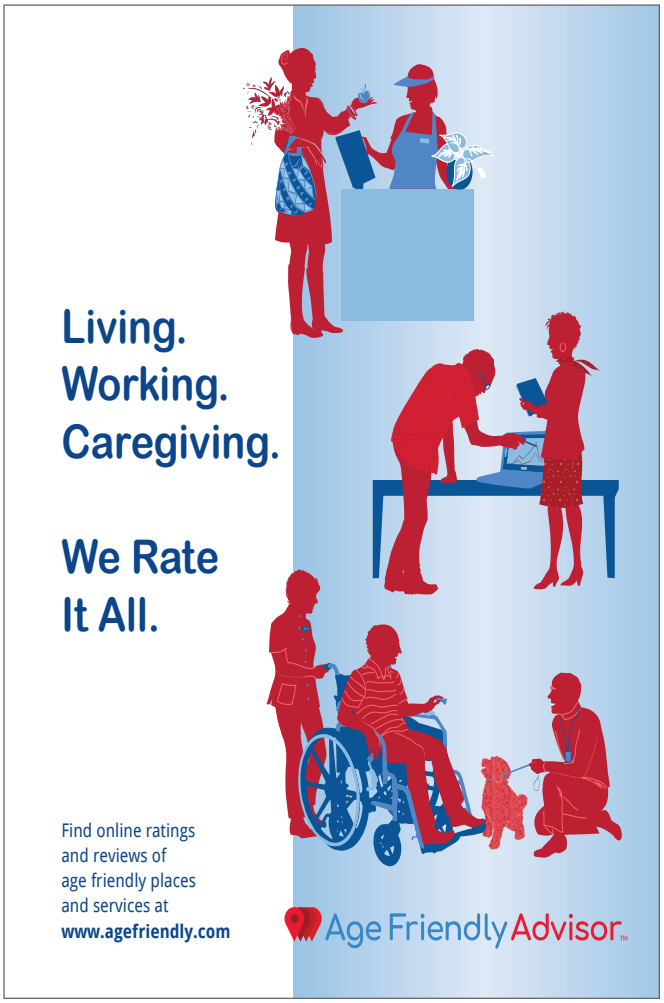
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