White Paper:

Identifying Interventions to Address Triggers of Decline in Vulnerable Older Adults

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Introduction

This white paper introduces a new conceptual model, developed by the Health Foundation of Western and Central New York (the Foundation) and the Syracuse University Aging Studies Institute (ASI). The Triggers of Decline model identifies potential events or changes that can trigger a decline into frailty in vulnerable community-dwelling older adults. There are no universal definitions of "vulnerability" or "frailty." This is one of the challenges faced by researchers and service providers interested in the health and well-being of older adults. Because there are no universal definitions, in 2014, the Foundation set out to identify working definitions to guide their work and to develop a conceptual model identifying factors with the potential to trigger frailty or functional decline in vulnerable community-dwelling older adults. The Foundation defines "frailty" as functional decline due to changes in physical, cognitive and/or mental health, and "vulnerable older adults" as people aged 60 or older that meet one or more of the following criteria: are at greater risk of decline, are in poverty, or are dually eligible for Medicare and Medicaid.

Community-dwelling older adults face the risk of singular or multiple events or changes in circumstance that can trigger a decline into frailty. Individual-level triggers are shaped by triggers found in the family and community contexts (such as insufficient social networks) in which the individual older adult lives, and by system and society level factors (such as transportation challenges). Each trigger in the model represents a potential intervention point which can be used to identify at-risk populations of older adults and evidence-based practices to address that risk and prevent the onset of frailty. This white paper introduces the Triggers of Decline conceptual model and discusses the availability of data used to identify at-risk populations or potential interventions. We conclude by identifying interventions with the potential to address multiple triggers and recommending that policy-makers and practitioners

utilize the model to improve data collection about at-risk populations and interventions addressing triggers.

Triggers of Decline

To be clear in our definition of vulnerable older adults, the Foundation first had to develop a working definition of triggers of decline. Triggers included in the model were identified through several phases of research. Foundation staff began developing the model by interviewing experts and practitioners in the field of aging. The Foundation subsequently partnered with Syracuse University's Aging Studies Institute (ASI) to identify potential evidence-based practices for addressing triggers, and to identify relevant measures of triggers in Western and Central New York. ASI conducted a meta-analysis of the extant literature on causes of frailty among community-dwelling older adults and on interventions preventing or delaying frailty and slowing declines in function caused by frailty, and compiled data identifying at-risk populations of older adults.

In general, triggers are events or later-life changes in the physical, cognitive, or mental health of otherwise healthy older adults living in the community that can lead to frailty, limit older adults' daily activities, and ultimately, result in the loss of independence. These triggers, which can occur suddenly or build over time, are best understood using an ecological perspective, which places individuals within family, community, and societal contexts (Bronfenbrenner, 1979). Older adults face the risk of singular or multiple individual-level triggers, including home management challenges, financial challenges, or physical limitations (Figure 1). These individual-level triggers are shaped by the triggers found in the family and community contexts in which the individual older adult lives, such as the community environment and access to services or the lack of a social network. These individual-level

triggers and family or community triggers are, in turn, shaped by system and society level factors, like resource disparities and transportation challenges.

(Figure 1 here)

As shown in Figure 2, each trigger category contains examples of specific triggers. While these triggers were placed in particular categories, as judged appropriate by the designers of the model, they could also be appropriate for inclusion in other trigger categories. Several of these specific triggers could just as easily impact older adults on more than one level. Each trigger in the model represents a potential intervention point, and can be utilized by policy-makers and practitioners alike to identify at-risk populations of older adults, and to identify potentially useful evidence-based practices to address that risk and prevent the onset of frailty.

(Figure 2 here)

Challenges in addressing triggers of decline

While developing the Triggers of Decline model, ASI and the Foundation encountered some key challenges that limit the capacity of practitioners and policy makers to effectively identify at-risk populations and address triggers of decline in older adults. First, there is a lack of data on local populations at risk of specific triggers and the lack of evidence on effective interventions. Many data sources only provided information on the state or national levels, which can make it difficult to identify local at-risk populations of older adults, and the data that was available for different triggers often covered different periods of time, making it difficult to paint a clear picture about the risks currently faced by local older adults. For example, data for some triggers may be available from the 2010 Census or as three- or five-year estimates from the American Community Survey, while for others it may be available from the Centers for Disease Control or the Behavioral Risk Factors Surveillance Survey for 2009 or 2012. Different data sources often also define “older adults” differently (e.g., 50 and older versus 65 and older).

Second, scientific evidence on interventions addressing triggers identified in this model is very limited. Often, the literature found on specific triggers focused more on proving the prevalence of a trigger than on addressing that trigger or reducing the risk of that trigger. In other cases, we were unable to identify any interventions in the literature for specific triggers in the model. This lack of evidence may be due to a lack of testing new ideas, a lack of investment in program evaluation, or merely that results are not published in peer reviewed publications. Whatever the sources of this challenge may be, there is a need for more standardized interventions, improved measurement, and replication of interventions that are proving to have a strong potential for impact. Overcoming this challenge would enable practitioners to better evaluate the effectiveness and appropriateness of well-known interventions with different sub-populations of vulnerable older adults.

Examples of Data Challenges

The availability of data enabling practitioners to assess the level of risk in their local area varies by trigger, as does the body of evidence supporting interventions to reduce risk. The following are examples of triggers for which there is inadequate data to either identify at-risk populations, recommend proven interventions, or both:

1. general risk of frailty,
2. food access and nutritional challenges,
3. mental health, and
4. alcohol and substance use.

General Risk of Frailty

The first step toward delaying or slowing the onset of frailty is the proper identification of older adults who are at risk for frailty, or who already meet the criteria for frailty. Examples of sub-populations who are at greater risk of frailty include, but are not limited to: those

aged 85 and older, those that are engaging in informal caregiving, older adults living with chronic comorbid conditions, including HIV/AIDS, and lesbian, gay, bisexual and transgender (LGBT) older adults (Community Commons, 2015a; Effros, et al, 2008; Guaraldi, et al, 2011; Witten & Eyler, 2012).

Identifying at-risk populations. On the population level, data is readily available to identify the percentages of the population aged 85 and older (Cornell Program on Applied Demographics, 2011; United States Census Bureau, 2015). Unfortunately, the Census Bureau does not provide any recent data on older informal caregivers, unless the family member for whom they are providing care is a child under the age of 18. This makes it difficult to identify this particular at-risk population. State agencies on aging do track service use by older informal caregivers in their state, but their clients may not be representative of all informal caregivers in their state. For example, 87% of caregiver support service users surveyed in New York State in 2009 were White, and 79% were female (New York State Office for the Aging, 2009). These percentages vary greatly from the racial and gender distributions of older New Yorkers, among whom 75% were White and 51% were women in 2009 (United States Census Bureau, 2010). As such, state Office for the Aging data does not provide an accurate estimate of what percentage of the state population may be engaged in informal caregiving.

LGBT older adults and older adults living with HIV/AIDS can be even more difficult to locate. Very few population surveys of older adults include questions about sexual orientation or gender identity, or about HIV status. Data from the 2014 Annual Community Survey indicate that 15.2% of householders in same-sex couples in the United States are aged 65 or older (United States Census Bureau, 2014). There is no question in the Census about gender identity. The New York State Department of Health provides reports on HIV/AIDS epidemiology across the state that divide the HIV-positive population in New York State between New York City and the rest

of the state. According to the 2015 annual HIV surveillance report from the New York State Department of Health, 16.8% of New Yorkers with HIV or AIDS living outside of New York City are ages 60 and older (New York State Department of Health, 2015).

Identifying at-risk individuals. There are a variety of ways to identify frailty in individual older adults in a specific community or group. Multiple frailty measures exist (Pande, Laditka, Laditka, & Davis, 2007), including but not limited to: acute and chronic conditions, renal failure, incontinence, vision problems, arthritis, bedfastness, and ADL limitations. There are various screening tools that can be used to assess older adults for risk of frailty in community and primary care settings. Jones and colleagues (2004) developed an index for in-home assessment of frailty in community-dwelling older adults, based on a comprehensive geriatric assessment, which they determined to be practical, clinically sensible, and accurate in terms of predicting future adverse outcomes. The Comprehensive Frailty Assessment Index assesses frailty indicators in psychological, physical, social and environmental domains (De Witte & Verte, 2013). The Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA-7) has been identified as an effective instrument for identifying frail older adults in primary care settings (Clegg, Rogers, & Young, 2015; Hoogendijk & Van Hout, 2013). Not all frailty assessments need to be conducted in person, or necessarily by physicians. It may be possible to screen larger populations of community-dwelling older adults for potential frailty using instruments like the Sherbrooke Postal Questionnaire (SPQ), which can be used to identify older adults that would benefit from more comprehensive assessment (Daniels, et al, 2012; Di Bari, et al, 2014).

Addressing frailty in older adults. Community organization models for preventing or addressing frailty are described in the literature but lack sufficient evidence of effectiveness. The most researched of these models is the “Village” model (Abrahams, 2011; Baldwin & Willett,

2013; Chandler & Robinson, 2014; Greenfield, Scharlach, Lehning, & Davitt, 2012; Nathan, Wood, & Giles-Corti, 2014; Peck, 2010; Scharlach, Davitt, Lehning, Greenfield, & Graham, 2014). The services and activities provided by villages vary (Scharlach, et al, 2014), and the effectiveness of the Village model in enabling frail elders to age in place varies based on services provided, self-reported health, and level of resident involvement in the community (Graham, Scharlach, & Wolf, 2014; Poor & Willet, 2012).

Food Access and Nutritional Challenges

Awareness has been growing about malnutrition among older adults, and the ways in which these nutritional deficits contribute to or cause frailty (Kim & Lee, 2013). However, there is still insufficient data on the numbers or location of older adults at risk for malnutrition or struggling with food access. The Gerontological Society of America recently identified malnutrition as a "hidden epidemic" among older adults, contributing to loss of muscle mass, diminished grip strength, and post-hospital syndrome (Bales & Blancato, 2014). Older adults in food deserts, or areas where it is difficult to buy fresh food, are particularly at risk of insufficient nutrition or malnutrition. Limited access to grocery stores, as measured by the number of stores per 100,000 people, could be one indication that an area is a food desert (Community Commons, 2015b). Older adults may also live in areas identified as having low food access, or Census tracts in which 500 people or 33% of the population lives further than ½ mile in urban areas and 10 miles in rural areas from the nearest supermarket (United States Department of Agriculture, 2015). Older adults who have access to food may still struggle with food insecurity. Food-insecure households are households reporting three or more food-insecure conditions, such as often or sometimes worrying if food would run out before they got money to buy more food, or food not lasting and not having money to buy more food (Coleman-Jensen, Gregory & Singh, 2014).

Identifying at-risk populations. The Census Bureau and Department of Agriculture report on food access among all age groups, rather than focusing on older adults as a unique population. However, Coleman-Jensen and colleagues (2014) indicate that of older Americans living alone, 9% reported food insecurity. Food insecurity is also higher in Black and Hispanic households, but older adults were not disaggregated by race in the report. Older adults with mobility limitations may also experience more barriers to food access (Huang, Rosenberg, Simonovich, & Belza, 2012). While the percentage of older adults living with food insecurity is lower than for other age groups, food-insecure older adults face greater risk of poor nutritional status and deteriorated physical and mental functioning (Academy of Nutrition and Dietetics, 2012).

Addressing food insecurity and malnutrition in older adults. Just as there is limited data on food access, food insecurity, and malnutrition among older adults, there is limited evidence of interventions effective in addressing malnutrition in this population. Some studies have evaluated interventions addressing undernutrition or malnutrition in older adults. For example, protein supplementation may improve physical function in low-socioeconomic status (SES) older adults (Kim & Lee, 2013) or lower the risk of frailty in older women (Beasley & Prentice, 2010), but the literature on these types of interventions is limited.

Mental Health

The mental health problems of older adults fall into two general categories: individuals aging with a serious and persistent mental illness (SPMI) and older adults who do not have a history or diagnosis of mental illness but who now struggle with depression and anxiety. While a diagnosis of an SPMI is often necessary to access formal mental health services, there is limited availability of geriatric psychiatry services for older adults with these conditions (Abrams & Young, 2006). Yet, without a formal mental illness diagnoses, older adults struggling with depression and anxiety have even more limited access to whatever geriatric psychiatry resources

are available in the community (Cadwallader, 2013). The National Institute of Mental Health (NIMH; 2015a) provides prevalence data for the broader category of "mood disorders" which includes major depressive disorder, dysthymic disorder, and bipolar disorder. In 2012, 16% of US adults aged 50 and older had some type of mental illness, 5.5% experienced a major depressive episode, and 3% were classified as having a serious mental illness (National Institute of Mental Health, 2015b; 2015c).

Identifying at-risk populations. While mental health practitioners need to distinguish between older adults with a history of serious mental illness and those with late-onset depression and anxiety, this distinction is not necessarily visible in the available data. For example, the National Institute of Mental Health reports a12-month prevalence of mood disorders – which groups life-long mood disorders with recent-onset depression – of 9.5% of US adults, with 45% of cases being classified as severe; however, these data do not distinguish between adults in different age groups. Similarly, the lifetime prevalence of mood disorders among US adults aged 60 and older is 12%; again, this data groups life-long mood disorders and recent-onset depression. In addition to the lack of distinction between different types of mental illness in the available data, this data is generally available on the national level, but it is difficult to find prevalence data on the state, county, or municipal levels. These issues with specificity and locality make it difficult for practitioners to assess community need and to design and fund intervention programs.

Mental health service utilization. The utilization of mental health services differs among older Americans depending on the type of mental illness. This data is also national-level data. For example, among older adults with a serious mental illness in 2008, 71% received services and/or treatment for that illness in 2008, compared to 86% of older adults with depression that same year (National Institute of Mental Health, 2015d). In general, Black and Hispanic older

adults (aged 50 and older) are less likely to use mental health services than are Whites (Figure 5; Substance Abuse and Mental Health Services Administration, 2015).

Addressing mental health in older adults. There are programs that have shown some success in improving mental health in older adults (Substance Abuse and Mental Health Services Administration, 2011). Programs include options like psychotherapy interventions, multidisciplinary geriatric mental health outreach services, and collaborative and integrated mental and physical health care services. Examples of programs proven to be effective include cognitive behavioral therapy (CBT), reminiscence therapy, the Program to Encourage Active, Rewarding Lives for Seniors (PEARLS), and Improving Mood, Promoting Access to Collaborative Treatment (IMPACT). To specifically address the mental health of older adults with mild to moderate dementia, the Preserving Identity and Planning for Advance Care (PIPAC) model, a patient-centered intervention, holds promise for providing assistance with advance care planning, and improving emotional and health-related outcomes (Hilgeman, Allen, Snow, Durkin, DeCoster, & Burgio, 2014).

Alcohol and Substance Use

The general public underestimates the prevalence of alcohol and substance use among Americans aged 60 and older. One in four older adults uses prescription psychoactive medications, and up to 11% of older women misuse prescription drugs (Simoni-Wastila & Yang, 2006). Researchers project that by the year 2020, 2.7 million adults aged 50 and older will be engaging in non-medical use of prescription drugs (Simoni-Wastila & Yang, 2006), and 5.7 million adults aged 50 or older will have some kind of substance use disorder (Han, Gfroerer, Colliver, & Penne, 2009). This is double the number estimated to have substance use disorders in the 2002-2006 National Survey on Drug Use and Health data (NSDUH). The projected increase is due to the size of the baby boom population and the higher rates of substance use in that

generation. The abuse of prescription and illicit drugs has been associated with higher age-sex standardized morbidity rates (Adrian & Barry, 2003). The prevalence of alcohol-medication use that places older adults at risk of adverse interactions range from 19% to 38%, and among identified at-risk drinkers, that prevalence rate increases to about 70% (Moore, Whiteman, & Ward, 2007). Nationally, the number of emergency department visits involving alcohol abuse in combination with other substances tripled among adults aged 65 and older between 2004 and 2011 (SAMHSA, 2014b).

Identifying at-risk populations. Data on substance use among older Americans is difficult to find, particularly on the local level. Often, governmental agencies reporting on substance use group all adults together or represent all older adults as one age group, erasing any differences that you might expect to see between middle-age (55-65), young-old (65-75), and oldest old (85+) adults. While the prevalence of both of these phenomena are lower among older adults, SAMHSA reports substance use disorders in 6% of people aged 60 and over, and heavy alcohol use in 2% of people aged 65 and older (SAMHSA, 2014a). Among older adults, the use or misuse of alcohol and drugs, particularly prescription drugs, increases the risks of under-recognition of and treatment for alcohol and drug problems, social isolation, interactions with prescribed medications due to age-related metabolic changes, and unintentional injury (Lynskey, Day & Hall, 2003). Binge drinking in older populations is of particular importance because it has been found to be associated with a variety of health concerns, including cardiovascular disease, poorly controlled diabetes, unintentional injury, and alcohol poisoning (New York State Department of Health, 2009). Research on the health-related effects of alcohol use in older adults is limited and inconclusive, but some studies do find an association between alcohol use and falls, functional impairment, cognitive impairment, and all-cause mortality (Reid, Boutros, O'Connor, Cadariu, & Concato, 2002).

Addressing substance use in older adults. The evidence base for substance abuse treatment in older adults is very limited. Lemke and Moos (2002) provide evidence that older adults fare as well or better than their younger counterparts in mixed-age alcoholism treatment programs. Other researchers provide evidence of successful treatment programs specifically targeting older adults (Schonfeld, et al, 2010), although some evidence points to a significant relationship between reduced substance use and the passage of time, rather than program completion (Outlaw, et al, 2012).

The prior section presented just a few examples of triggers identified as causing or exacerbating frailty, for which we have too little information about at-risk populations or individuals, or about proven interventions to improve outcomes and reduce risk of frailty. Despite these general limitations in data availability, there are some practice areas that do offer a sufficient evidence base to inform the field. These are promising examples of how interventions can be rigorously evaluated and disseminated, and they demonstrate the usefulness of intervention models that simultaneously address multiple triggers of decline in preventing or delaying the onset of frailty.

Interventions Addressing Multiple Triggers of Decline

Coordinated and Integrated Care

Multi-dimensional patient-centered care programs have shown promising results in terms of slowing or reversing frailty (Bibas, Levi, Bendayan, Mullie, Forman, Afilalo, 2014). Some multi-professional group interventions, like the Elderly Persons in the Risk Zone study, have been shown to be effective in delaying deteriorations in self-rated health and postponing ADL dependence in older adults at risk of frailty (Gustafsson and Dahlin-Ivanoff, 2012). Multi-component nurse-led health promotion and disease prevention (HPHD) programs also have been shown to improve health-related quality of life in community-dwelling frail older adults (Markle-

Reig, Browne, & Gafni, 2013). It is clear these interventions need to be multifaceted because nursing visits alone do not appear to be successful at preventing the advancement of frailty (Kono, et al, 2012; van Hout and Nijpels, 2010). Tikkanen and colleagues (2015) developed a multifaceted, individually targeted intervention – the Geriatric Multidisciplinary Strategy for the Good Care of the Elderly Study (GeMS) – which involved the assessment of medications, addressing health care and nutritional needs, providing oral health maintenance and physical activity counseling to address upper- and lower-body strength – that successfully prevented mobility limitations in frail and pre-frail older adults. Specifically, coordinated care programs or integrated care delivery systems may be more effective in slowing the progression of frailty in older adults than traditional models of primary care (Beland & Hollander, 2011).

One such coordinated care program, the Program for All-Inclusive Care of the Elderly (PACE), was designed to provide integrated care to frail older adults or disabled individuals who might otherwise require nursing home care. In addition to allowing frail elders to continue living in the community, PACE has been shown to reduce hospital admissions, number of hospital days length of stay, and emergency room visits (Kane, et al, 2006) and is associated with improvements in functional status and self-assessed health (Mukamel et al. 2007). Evaluations of PACE programs indicate that clients become increasingly frail over time, which may be evidence that the programs are succeeding in enabling frail older adults to age at home and avoid or delay institutionalization in skilled nursing facilities (Pande, et al, 2007).

Not all older adults who are frail or are at risk of frailty meet the care needs requirements to enroll in programs like PACE (Pande, et al, 2007). Outside of integrated care systems like PACE, demonstrations of comprehensive care models have been evaluated for their potential to prevent disability or slow the advancement of frailty in community-dwelling older adults. One such model is Prevention of Care (POC), a nurse-led interdisciplinary program providing

individualized assessments, interventions, case management, and follow-up through primary care settings (Metzelthin, et al, 2013). Other integrated care models have shown limited short-term effects on some aspects of quality of life in frail older adults, but more research is needed (Looman, Fabbricotti, & Huijsman, 2014).

Chronic Disease Management

Americans with chronic health conditions are living longer, which means that in addition to being at higher risk of frailty, they also spend more time interacting with the health care system. The Stanford University Chronic Disease Self-Management Program (CDSMP) has been proven to improve symptoms, participants' ability to engage in everyday activities, and communication with health care providers, and to reduce depression and decrease emergency department visits (Ory, et al, 2013). CDSMP has been widely disseminated through Area Agencies on Aging (AAA) but it is not the only model of chronic disease self-management that may be beneficial to older adults, particularly in rural or underserved populations (Ory, et al, 2013).

The CDSMP has been modified for delivery to African American older adults with some success, including small increases in time spent in physical activities, improvements in cognitive symptom management, increases in self-efficacy, and decreases in health distress (Gitlin, et al, 2008). Disease self-management programs have also been successful among older women with heart disease, resulting in fewer inpatient days and lower inpatient costs (Wheeler, 2003). Telehealth interventions engaging homebound older adults with heart and chronic respiratory failure in self-care disease management have shown improvements in general health, social functioning, and depressive symptoms (Gellis & Thomas, 2012). Volunteer-run community-based interventions have had some success in helping older adults manage their blood pressure (Truncali, Dumanovsky, Stollman, & Angell, 2010). Older adults with HIV/AIDS would benefit

from chronic disease management programs, and may also benefit from rehabilitation programs designed specifically to assist them with physical, mental and social health challenges resulting from complex comorbidities arising from long-term use of antiretroviral therapies (O'Brien, et al, 2014).

Barriers still exist for older Americans who need access to self-management programs, but as primary care medicine becomes more focused on the medical home model, self-management programs will become even more critical for patients with chronic health conditions (Ory, et al, 2013). Health literacy can be a barrier to effective chronic disease management in older adults, although there are not very many published studies of health literacy interventions in general, or as they related to chronic disease management. Ntiri and Stewart (2009) provide evidence that transformative learning principles targeting specific conditions may improve health literacy in African American older adults with chronic illness, encourage them to seek knowledge about their condition, and improve chronic disease self-management. Older Mexican Americans provided with a self-help educational brochure or a combination of the brochure and a visit with a community health advocate were more likely to report asking their doctor about colorectal screening (Castaneda, et al, 2012). Health literacy interventions would also benefit older African American adults living with HIV, particularly if they address the culturally specific needs of the targeted population (Gukamo, Enah, Vance, Sahinoglu, & Raper, 2015).

Recommendations

The availability of data enabling practitioners to assess the level of risk in their local area varies by trigger, as does the scientific evidence supporting interventions to reduce risk. This white paper has provided some examples of triggers of decline for which there is inadequate data to identify at-risk populations or to recommend proven interventions. Available data indicate that all of the triggers discussed in this white paper impact older adults across the United States.

There is evidence of instruments proven to be useful in identifying older adults at risk of frailty, and of interventions that address malnutrition, geriatric mental health, and chronic disease management. Some of the identified interventions, such as screening general populations of older adults for risk of frailty, and multi-dimensional patient-centered care and chronic disease management, have the potential to address multiple triggers.

Policy Recommendations

We recommend that policy-makers use the Triggers of Decline model to advocate for better data collection regarding risk among older adults, particularly on the local and regional levels, and to enhance practitioners' ability to assess the level of risk among community-dwelling older adults for the triggers identified in the model. We also recommend that more resources be invested in building the evidence base for interventions that address these triggers. Practitioners need to continue to test new ideas, conduct more rigorous program evaluation, support the replication and expansion of promising pilot programs, and commit to broad dissemination/publication of interventions that effectively address frailty and the many potential triggers of decline.

Practice Recommendations

Geriatricians and other practitioners working with community-dwelling older adults should implement screening procedures to identify those older adults at risk of frailty, like the Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA-7; Clegg, Rogers, & Young, 2015; Hoogendijk & Van Hout, 2013), and should follow up these initial screenings with the Comprehensive Frailty Assessment Index (De Witte & Verte, 2013). Older adults who are identified as being at risk of frailty should be enrolled in multi-dimensional patient-centered care programs and chronic disease management programs, according to their individual needs. Practitioners who are already successfully preventing or slowing the onset of

frailty should conduct formal evaluations of their services and contribute the results of these evaluations to the knowledge base about at-risk populations and interventions that successfully address triggers of decline in this population.

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TRIGGERS OF DECLINE

Triggers of Decline result from risks and challenges older adults face not only individually, but in the context of their families and communities, within the health care system, and in society overall.

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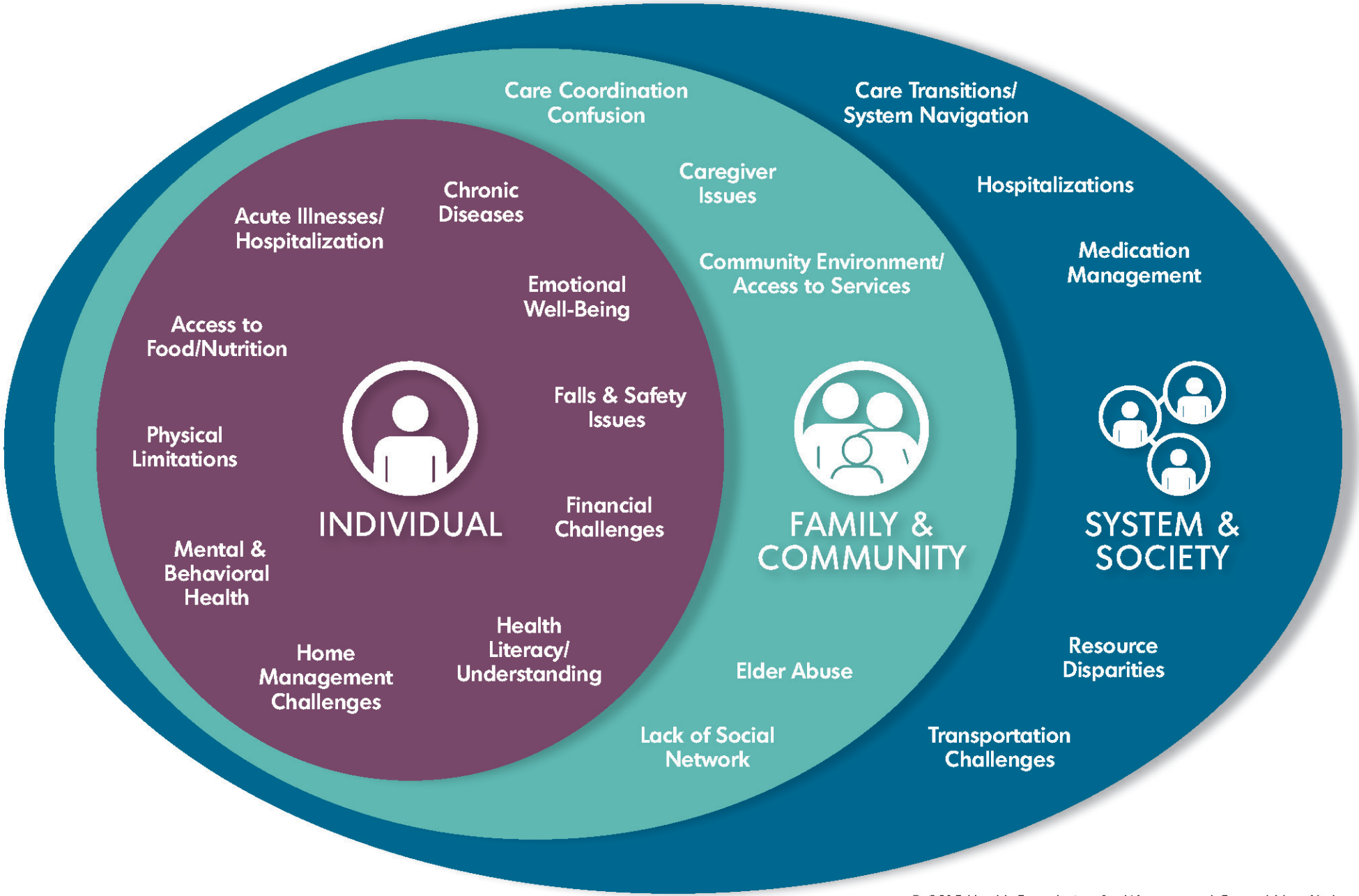

TRIGGERS OF DECLINE

Triggers of Decline are events that precipitate a decline in physical, cognitive, or mental health for otherwise healthy older adults living in the community. The following examples of triggers, which can occur suddenly or build over time, result from risks and challenges older adults face not only individually, but in the context of their families and communities, within the health care system, and in society overall. Triggers can lead to frailty, limit older adults' daily activities, and ultimately, result in loss of independence.

INDIVIDUAL LEVEL

Acute Illness Precipitating Hospitalization	• Ill-defined conditions ** • Lack of care coordination • Circulatory disorders	• Respiratory disorders • Kidney disease • UTI	• Angina and heart failure • Diabetic complications • Cancer
Chronic Disease Management	• Multiple chronic illnesses	POOR MANAGEMENT OF: • Arthritis • Cardiovascular disease • Cancer • Chronic kidney disease • Diabetes	• Heart disease • HIV/AIDS • Hypertension • Lung disease • Stroke • Pain
Emotional Well-Being	• Negative/pessimistic mindset • Fears • Stigma around accepting help/services • End of life care and concerns	• Poor quality of life • Low self-efficacy • Societal stigma associated with aging • Loss of personal resilience	• Loss of spouse/family • Social isolation • Loneliness • Living alone
Falls	• Impaired vision • Impaired hearing	• Poor mobility • Impaired balance • Unsafe home environment	• Physical weakness • Fear of falling
Finances	• Fixed income • Rising costs • Challenges managing finances • Being "house poor" • Trouble with home maintenance	• Food access/nutrition challenges • Stigma accepting assistance • Financial elder abuse • Target for fraud	• Out of pocket medical expenses • Lack of long term care insurance • Inability to pay for in-home services
Food Access/ Nutrition Challenges	• Difficulty with grocery shopping • Difficulty with meal preparation	• Food deserts • Poor diet/malnourishment • Weight loss due to poor nutrition	• Obesity • Dehydration • Lack of financial resources to purchase food
Home Management Challenges	• Code violations • Unsafe home environment • Trouble with housekeeping • Hoarding	• Difficulty coping with weather (snow, ice, etc.) • Difficulty keeping up with yard and property maintenance	• Paying for utilities • Paying for home modifications
Mental Health/ Behavioral Health	• Depression • Isolation • History of PTSD • History of psychiatric problems	• Substance use/abuse • Dementia • Cognitive impairment or cognitive decline	• Few mental health services delivered in home setting • Stigma accepting services • Need a diagnosis to access mental health services
Physical Issues	• Impaired vision • Impaired hearing • Physical Limitations • Limitations in Activities of Daily Living* • Injuries	• Decreased mobility • Decreased physical activity • Skin issues • Poor self-perceived health • Poor oral health	• Effects of food insecurity and poor nutrition • Osteoporosis • Insomnia • Incontinence
Poor Health Literacy	• Unable to understand medical condition, medications • Unsure or unaware about care needs	• Unable to understand services available • Impaired self-management abilities	• Caregivers may also have poor health literacy

*Activities of Daily Living: eating and drinking, dressing and bathing, toileting and continence, walking and transferring, hygiene and grooming.

**Ill-defined conditions: respiratory symptoms, collapse, senility, digestive symptoms, cognitive and behavioral symptoms.

FAMILY/COMMUNITY LEVEL

Care Coordination

- Poor communication between medical providers & caregivers
- Poor communication between medical providers & social service providers
- Lack of coordination & potential duplication of services
- Difficulty navigating services
- Insufficient advance directives or advance care planning
- End of life care and concerns
- Insufficient elder-competent workforce
- Poor care transitions after hospital & long term care stays

Caregivers

- Caregiver burnout
- Financial/career stress on family caregivers
- Care coordination problems
- Unable to afford paid caregivers
- Inadequate caregiver support
- Family conflict

Community Resources

FOOD ACCESS/NUTRITION

- No access to Meals on Wheels program or congregate dining sites
- Lack of awareness of available food options
- Food programs not meeting cultural needs and preferences
- Food deserts

SAFETY

- Lack of home safety/security
- Unsafe or poor neighborhood conditions
- Poor walkability

ACCESS TO SERVICES

- Limited or no access to senior centers, adult day care centers and other support services
- Lack of transportation
- Insufficient funding for services
- Limited ability to meet needs of non-English speakers and the hearing impaired
- Insufficient workforce to deliver in-home services
- Over-reliance on volunteers
- Lack of funding for housing assistance

Elder Abuse

- Abuse by family, friends, paid caregivers and/or strangers
- Financial abuse/theft/extortion
- Physical abuse
- Emotional abuse
- Scams/fraud

Social Network

- Little or no local family
- Family issues/poor relationships
- No pets
- Loss of spouse, peers and/or family
- Living alone
- Social Isolation or disengagement from neighbors/community

SYSTEM/SOCIETY LEVEL

Care Transitions	• Difficulty navigating services • Poor communication among service and medical providers	• Lack of appropriate community based follow-up care • Training and support for family caregivers prior to discharge	• Inability to access services and needed supplies (i.e. wheelchairs, prescriptions, etc) in timely manner
Disparities in Access to Resources	• Race, ethnicity, gender, geography, language • Lack of community engagement	• Sexual orientation and gender identity • Financial limitations • Mobility limitations	• Culturally inappropriate service delivery
Impact of Hospitalizations	• Hospital acquired infections • Muscle atrophy • Delirium	• Hospitalization-associated disability • Stress, anxiety, depression	• Poor care transitions between and after long term care and hospital stays
Medication Management	• Polypharmacy • Poor communication between pharmacists, primary care and other providers	• Regulations challenges re: help with medications in the home • No access to qualified person to fill pill boxes • Accidental medication abuse	• Self-management problems • Poor or limited Medications Therapy Management (MTM) • Limited access to patient-centered medication instructions
Transportation Needs	• Unsafe driving or loss of ability to drive	• Lack of access to transportation to doctors, grocery, errands, etc • Lack of transportation for home health aides	• Rural, urban and suburban challenges re: transportation (i.e. lack of public transportation, complexity, etc)

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To learn more about how the Health Foundation is working to help older adults in our communities avoid or mitigate the triggers of decline, visit www.hfwcny.org.