Seniors are living longer than ever before – with challenges. For the oldest baby boomer who is now aged 70 and for many seniors, an unprecedented life expectancy has created a plethora of unforeseen opportunities – women reaching age 65 will live on average to 88.8 and men to 86.8. For those who are in good health, they can continue to enjoy family and friends – like grandchildren, assuming they live nearby. But for many that is not the case. While they may have retired to better climates or retirement locations, their families and contacts may remain behind or have dispersed. Families live further away from relatives than ever before -- 34 million people in the United States provide or manage care for someone age 50 or older, with 15 percent of them living more than an hour away.

Side effects of this new old age. Challenges confront those living into their mid-80s and beyond – and that can contribute to isolation and its effects, such as:

- Living away from family or alone. One in four will live past 90. According to the Social Security Administration, not only will one in four live past 90; independent of health status, one in 10 will live past age 95.⁴ One in five residents of Florida are aged 65+ -- in fact, in Sumter County, west of Orlando, more than half of the residents are aged 65+.⁵ In fact, the Census profile of older adults confirms that 46% of women aged 75+ live alone, many of them widows.⁶
- Loss of contact with family. In some cases, elderly family members may have lost contact with children or grandchildren initially due to divorce, conflict between siblings, or other causes of estrangement. To mitigate the issues of dwindling communication,

- 'National Day of Listening' was launched in 2015 by StoryCorps, a non-profit project focused on creating an archive of more than 50,000 interviews of family histories.
- Hearing loss. 47% of aged 75+ suffer from some hearing impairment or loss. ⁷ Among adults aged 70 and older with hearing loss who could benefit from hearing aids, fewer than one in three (30 percent) has ever used them. ⁸ A survey by the National Council on Aging found that those with untreated hearing loss reported feelings of sadness or depression that lasted two or more weeks during the previous years. Among respondents with more severe hearing loss, 30 percent of non-users of hearing aids reported these sad feelings, compared to 22 percent of hearing aid users. ⁹
- Vision impairment. Adults older than 80 years comprise 8 percent of the U.S. population, but account for 70 percent of cases of severe visual impairment. And even moderate vision impairment (low vision) can result in depression and social isolation. The four leading eye diseases affecting older Americans are age-related macular degeneration, cataracts, diabetic retinopathy, and glaucoma. As people age, they are far more likely to have serious age-related eye conditions.
- Mobility limitations. Arthritis is the most frequently occurring chronic condition of older adults and is a leading cause of disability in the US.¹³ Further, arthritis (or other physically limiting age-related conditions) can result in limitations in walking or climbing stairs, or social participation in activities such as going to the movies, religious or social gatherings.

The greatest generation can be stranded on an island of isolation and lack of inclusion Potentially far from family, possibly suffering from isolating physical conditions, the data confirms that older adults are at risk for social isolation, loneliness, and health-related side effects:

- Isolation has been linked to depression and increased mortality in older adults. In a national study of 2101 older adults, researchers noted that feelings of loneliness were correlated with increased mortality over a multi-year period. Further, loneliness both affected and was affected by depressive symptoms and functional limitations over time. In fact, in a recent study, molecular changes over time were noted in chronically lonely individuals.
- Isolation has been linked to rise in blood pressure due to stress. Loneliness can also impact other chronic conditions, such as high blood pressure. In another study, it was shown that "loneliness interacts with age to augment cardiovascular risk to social evaluative threat. ¹⁶ Lack of social connection may also be as significant an influence on poor health as obesity. ¹⁷
- Isolation has been linked to vulnerability to scams. Although this may be partly due to the fact that scammers target them more, studies have shown that the elderly may be more susceptible to efforts to deceive them perhaps due to a decline in 'emotional recognition' capabilities. ¹⁸

grandPad offers a path for boosting quality of life through connection

While technology has been shown to support social connections in all ages, the oldest population aged 75+ has less benefit because fewer of the aged 75+ segments, according to Pew Research, go online or have broadband at home. Older adults who have physical limitations or are isolated from long-distance families could benefit from access to social technologies that keep them up to date with news, events, and family gatherings. Some older adults find the pace of technology change daunting and have remained on the sidelines as a result.

But that is beginning to change – and is particularly facilitated by technology offerings that are easier to use. An easy-to-use device like grandPad can, according to the company, help pull older adults across the gulf of technology change, enabling them to have greater autonomy – be engaged in their own legacy across generations. grandPad, a tablet introduced in early 2015, was designed with the older population, aged 75+ in mind (average user age is 82), simplifying the user interface, enabling mastery of a new device and offering benefits and access that include:

• Seeing (photos, video) what's going on. grandPad provides the capability for family members to effortlessly send their photos and videos to their older adult loved ones via the grandpad companion app (on their cell phone and computer). These photos and videos are automatically saved in the senior's photos app for later viewing, regardless of the file format. The photos appear in a continuous loop on the grandpad as the grandpad sits on its especially designed charging stand. With a simple press of

a button, seniors can select the images as favorites to make them easy to find later or deleted them they're no longer needed.

- Connecting grandparents, children, and grandchildren through video chat. The device is pre-configured with Internet access/service built in to the subscription cost. When the user receives the product, the rep will find out which songs the senior likes and will load them onto the tablet, set up contacts for family members, and will configure the grandPad so that it harvests Facebook and Instagram photos and videos and automatically loads them into the tablet. Users of grandPad can then click on a 'Call' application to initiate or receive a video call from family members enabling chatting about what's new and what's next.
- **Hearing music.** Research is beginning to show the impact of music and neural pathways. As part of the initial setup of grandPad, the representative configures a curated set of music that is important to the user, enabling them to hear it by tapping an icon on the screen. In addition, the iOS and Android companion apps enable family members set up with permissions to add music to the user's collection.
- Obtaining transportation. 15.5 million Americans over the age of 65 live in areas where public transportation service is poor or nonexistent. Additionally, according to AARP & American Public Transportation Associations, more than 20% of Americans over 65 don't drive and thus are at further risk of remaining isolated in their homes. grandPad has integrated the Uber transportation request service into the application menu, enabling seniors living in areas with Uber coverage to request a ride through the grandPad platform.

- Sharing stories via voice recordings with photos from albums. The grandPad user can record their comments and personal stories about a photo with the grandPad companion app, family members can respond, adding their own comments as well.
- Playing games. grandPad includes such games as Solitaire, Crossword,
 Wordsearch, or Blackjack from a list of games and in addition, enables saving a game in progress, or clearing the game and starting over.
- of scams perpetrated on seniors is accelerating and vulnerable seniors are the targets. Unlike typical tablets, grandPad only allows emails, phone calls, and video calls from trusted family and friends. An octogenarian who had been repeatedly preyed upon by telephone scammers (loss totaling over \$600K loss), began to use a grandPad at age 88 and was able to finally break the cycle and only connect with friends and family for the final years of his life. He credits grandPad for "putting him back in the game of life".

grandPad fills a void in a marketplace of too-complex technology that many seniors view with trepidation. Says Scott Lien, co-founder of grandPad: "I wanted to help other families bring the greatest generation into the joy and buzz of an online life from the youngest to the oldest. We all have an obligation to help improve the lives of those around us. I believe grandPad can be part of the solution."

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