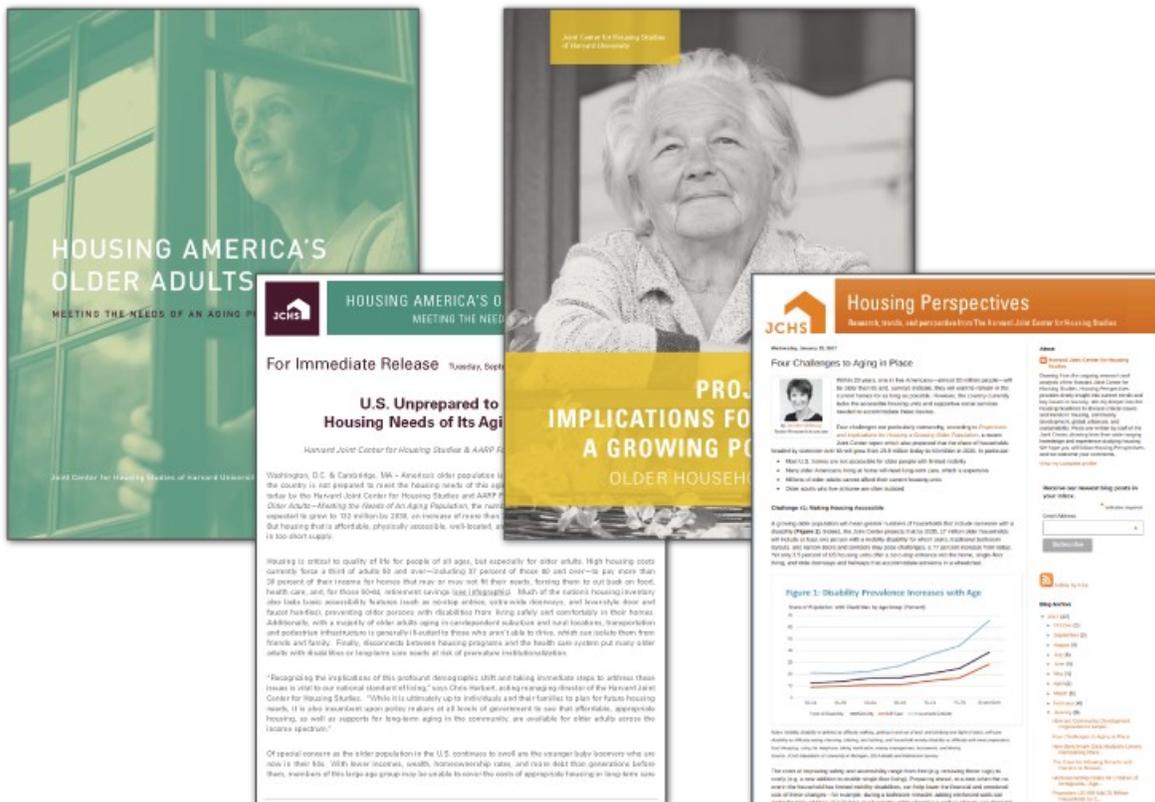


Harvard Documents describes “ppod” Concept and Identifies Market Potential without any Knowledge of ppod!



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Four Key Documents support the “Ppod” Concept!

1. **"Housing America's Older Adults" Meeting the needs of an Aging Population.**
Written by; Joint Center for Housing Studies of Harvard University 2104.
2. **“U.S. Unprepared To Meet the Housing Needs of Its Aging Population”** Press Release 2014 written by Harvard Joint Center for Housing Studies and AARP Foundation.
3. Their more current study titled **“Projections & Implications for Housing a Growing Population: Older Households 2015-2035”**. Written by Joint Center For Housing Studies of Harvard University 2015.
4. Blog Post; Titled **“Four Challenges to Aging in Place”**. 2017 Housing Perspectives. Research, trends and perspectives from the Harvard Joint Center for Housing Studies. Written by Jennifer Molinsky, Senior Research Associate.

While reading Harvard’s first 2014 study it quickly became apparent to me this study was credible supporting documentation for the Ppod concept. Written by an independent well known group not affiliated with myself or Ppod in in anyway. This first study was written the same year I began having my own thoughts about Ppod’s concept. It parallels and dovetails amazingly well with my very own thoughts and research to date. I find it ironic that the **Ppod** concept is so well described in these writings. I saw these documents for the first time 9/16/2017. A few years after mine own concept development of Ppod was well on its way and documented.

The above (four) documents parallels mine own research and innovative design characteristics to date for aging seniors in America. Listed are just 25 areas gleaned from these studies which support my own direction for the creation of Ppod. The following sentences are found in these Harvard documents describing Ppod or it’s need.

25 key findings in the above mentioned Harvard Documents that support Ppod and it’s need:

1. The **existing U.S. housing stock is unprepared** to meet escalating need for afford ability, accessibility, social connectivity and supportive services.
2. Much of the nations **housing inventory lacks** the basic accessibility features, preventing older adults with disabilities from living safely and comfortably in their homes.
3. Disconnects between housing programs and the health care system put many older adults with disabilities or long term care needs at risk of premature institutionalization. We need to find **“Bridge Housing”** that transitions aged seniors from home to end of life care.
4. The **high housing costs** force millions of low income older adults to sacrifice spending on other necessities including food, undermining their health and well being.
5. 67% of seniors want to **age in place** by staying in their communities as long as possible.
6. **Less than 1% of homes** has the necessary (**all 5 design elements**) no step entry, single floor living, extra wide door ways and halls, accessible electric controls and switches, and lever style door faucet handles, showering and bathing. This is a major challenge going forward. Great financial costs in remodeling to meet these design elements. These costs would be \$13.2 billion dollars to update 5.5 million homes. Most only need these design elements less than 2 years. Many of these same homes have other major deficiencies such as roof, heating, plumbing, and other issues as well. Making ADA only investments very questionable.

7. The lack of accessible, **affordable housing** can result in premature stays in nursing homes or inability to return home after hospitalization.
8. Promising **entrepreneurial approaches** in the realm of design, urban planning, health and wellness, and social engagement **must emerge**.
9. Private sector must develop **new housing options and technologies and services** for assisting older adults to age in the community.
10. A number of Federal efforts need to be expanded. In particular, **rental** (lease) assistance makes a crucial difference in the quality of life who receive it.
11. In addition, changes to Medicare and Medicaid would enable better coordination of affordable, **accessible housing** with long term care.
12. Meanwhile, state Medicaid programs **can reorient their funding** to enable low-income households to age in community **rather than in institutional facilities** with better outcomes.
13. For the private sector, the growth of older adult population provides vast opportunities to **innovate in the areas of housing and supportive care**. Creating the potential for older adults to have higher **quality of life** than ever before.
14. **Changing population**; with the oldest boomers now crossing the 65 year old threshold, population growth among 65 -74 year olds is set to soar. The numbers projected to climb from 21.7 million in 2010 to 32.8 million in 2020 and then to 38.6 million in 2030.
15. By age 80, three out of five households will consist of a single person. Women make up nearly 75% of this group. This number will **double from 6.9 million in 2015 to 13.4 million in 2035**.
16. Although people are living longer. Their ability declines and they **report difficulty** with the activities of **daily living; bathing, dressing, eating, and toileting**. **Families need help** in this to better care for seniors longer.
17. **Appropriate housing with supportive services** can mean the difference between independent living and care in an institutional setting.
18. **Increasing presence of low income households**. By 2024, 6.5 million households will have incomes under \$15,000. Housing cost burdens are the single greatest factor. Hunger and homelessness then follows with risks in being victims of crime. Homeless adults aged 62 and over will more than double from about 44,000 in 2010 to over 95,000 in 2050.
19. **Debt Burdens on the rise of seniors**. More than 70% still paying on mortgages ages 50-64. Consumer debt has risen with credit card & auto loan debts. Meanwhile the median older home owner held \$10,000 in cash. While median renter only held \$1,000 little cushion in either scenario in the event of an emergency. For many older renters, securing **subsidized housing** is the key to financial stability.
20. Long term care costs are expensive; Genworth Cost of Care for monthly services for homemaker services = \$2500 and a home health aide was \$2600 monthly. These are all things family members can **provide with the needed tools and support services**. **Care givers can last longer and seniors stay in the home longer**.
21. With the high cost of long term care, many older adults with functional or cognitive impairments rely on family or friends for care. **Two out of three older adults with disabilities** who review long term care services at home get their care exclusively from family members-primarily wives and adult daughters. **Concern-how long can family hold up and provide care without the proper tools?**

22. This aging population represents an **enormous business opportunity** for developers of **innovative housing and services** that support aging in community.

23. Government at all levels must help address shortages of affordable and accessible housing for older adults. But state and local governments have a big role to play. **Municipalities in particular can adapt their building codes and zoning regulations** to encourage production of more **diverse** and **flexible** housing.

24. But, ongoing **innovation** will be needed to meet the diverse needs and preferences of the growing older population.

25. **Every individual** can help the nation prepare for the needs of older adults by supporting public policy that promotes livability, broadens housing options, **better coordinates health and housing programs and supports living in the communities.**

What I find most interesting. While they mention the importance and need of skilled nursing homes or end of life care. They describe the need of something more, something missing, something yet to be created that is innovative and is encompassing of the missing components needed to address the growing concerns. Something that will provide **“bridge, flexible, affordable, age friendly, aging in place housing”**. May I add six missing words; *portable, temporary, telemedicine, and micro care center*. These six words were missing because this study identified the needs and didn't attempt to define the solution. They left this to the private sector and Ppod to do so. Ppod has been defined very well here without ever meeting Harvard's research associates or authors!

Compiled by Mark Hunter, Living Solutions©September 2017

Sources: Joint Center for Housing Studies of Harvard University, 2014, 2015, 2017