LANDSCAPE OF

CAREGIVING INNOVATIONS

Bringing Together Caregivers, Innovators, Services, and Solutions



Susan W. Golden, Sc.D. & dciX Caregiving Innovations Project

Stanford DCI dciX



CAREGIVING INNOVATIONS

Bringing Together Caregivers, Innovators, Services, and Solutions

February 2023

Susan W. Golden, Sc.D.

Director dciX and Adjunct Professor Stanford Distinguished Careers Institute, and The dciX Caregiving Innovations Project

Stanford | Distinguished | Careers Institute

The Stanford Distinguished Careers Institute (DCI) offers highly accomplished individuals from all walks of life the opportunity to come to Stanford for a year-long residential program of personal renewal and community engagement. The program seeks participants who are ready and eager to pause, think, explore, develop, and prepare for their future as citizens of their local, national, and global communities. The dciX initiatives were launched in 2018 to harness the talent and expertise of the DCI community, and DCI Fellows have contributed their expertise to the Landscape of Caregiving Innovations review described in this report.

STANFORD dciX CAREGIVING INNOVATIONS PROJECT

We thank the following individuals for their invaluable contributions to the Stanford Distinguished Careers Institute (DCI) dciX Caregiving Innovations Project.

Susan Alexander, DCI 2019

Susan Calandra, DCI 2019

Brittany Rayna Carlson,
DCI Community Engagement and Research Programs Manager

Nancy Carlson, DCI 2019

Mark Clapper, MD, DCI 2018

Michael Costa, DCI 2017

Mimi Dunne, MD, DCI 2019

Jeannine English, DCI 2018

Jack Keene, MD, DCI 2019

Mitra Naemi, DCI 2021

Victoria Ngo, PhD, Postdoctoral Fellow, Health Policy

Carol Schrader, DCI 2019

Eric Schrader, DCI 2019

Ilana Shumsky, MD, DCI 2021

Debbie Siegel, DCI 2020

Dolores Gallagher Thompson, PhD, Professor of Research, School of Medicine

Steve Welker, DCI 2019

-Susan W. Golden, ScD, DCI 2016

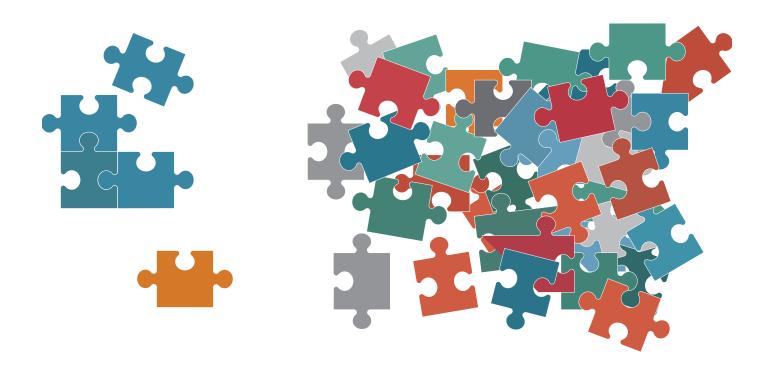
TABLE OF CONTENTS

Part I	
Section	I: Introduction and Magnitude of the Challenges7
Fir	ey demographics nancial impact pact on caregiver health
Section	II: The Caregiver Journey and Pain Points 11
Th Th	nallenges faced by caregivers and recipients le Information Journey le Care Coordination Journey le Quality-of-Life Journey
Section	III: The Innovator Journey and Pain Points18
Le	ootlight on caregiving innovators essons from the front lines ommon obstacles to growth
Ma Op	IV: Mapping the Innovations Landscape
Part II	
Th Sta Po	V: The Future of Caregiving Solutions
Ak	VI: Bringing the Pieces of the Puzzle Together

Identifying gaps

A coalition of trusted partners

Ensuring universal access



LANDSCAPE OF CAREGIVING INNOVATIONS: PART I

CAREGIVER JOURNEY AND PERSPECTIVES FROM INNOVATORS



SECTION I

INTRODUCTION AND MAGNITUDE OF THE CHALLENGES

"Family caregivers are interfacing with a fundamentally broken and disintegrated governmental system that is central to the financing of a lot of the care delivery system." —Executive Roundtable participant

For individuals who take on the responsibility of caring for another adult experiencing illness, disability, or declining abilities, the journey can often be challenging, lonely, costly, and exhausting. As the U.S. continues to address the impact of Covid-19 on caregiving, it has become even more vital to recognize and support family caregivers as the cornerstone of society. These family caregivers are often also referred to as informal caregivers or unpaid caregivers.

Today, more than one in five Americans (21.3%) are caregivers, defined as having provided care to an adult at some point in the past 12 months or to a child with special needs. According to the <u>AARP</u> and the <u>National Alliance for Caregiving</u>, in 2020 there were nearly 48 million unpaid caregivers in the United States, a number that swelled further during the pandemic.

Despite the enormous and growing needs of these unpaid caregivers and those in their care, there is no comprehensive infrastructure in the United States to offer support. Becoming a family caregiver is a complex journey that often requires obtaining and evaluating vast amounts of information, for which there is no central clearinghouse; improvising and coordinating a care system for their loved one; identifying who will pay for the needed services and products; and adjusting to the changing needs of the care recipient. They do all of this while simultaneously working (61%), caring for their own children (47%), and dealing with their own health, social, and financial consequences of managing and providing care for an older family member (80%).

In partnership with Pivotal Ventures, the goal of the Stanford Distinguished Careers Institute's dciX-Caregiving Innovations Project is to catalyze significant change in the underserved market for adult caregiving. We set out to evaluate the current state of solutions and innovations to support caregivers and care recipients, and identify ways to make the journey less fraught and overwhelming for this significant population of unpaid family caregivers. We hope this project will advance the efforts of the many organizations and individuals working to spur creation of an infrastructure for caregiving in the U.S., on which so much of our economy rests.

The support needed by family caregivers of older adults and their recipients may come from several different sources:

- 1. Innovative companies with products and services that assist in the varied needs of the care recipient.
- **2**. Employers who provide benefits and assistance in recognition of the caregiving challenges faced by their employees.
- **3.** Public-sector medical reimbursement and coverage programs (Medicare, Medicaid, and Medicare Advantage).
- **4.** State and federal policies that address caregiving needs by providing financial incentives to all stakeholders.

The Stanford dciX Caregiving Innovations Project assembled databases of companies focused on solutions for caregiver challenges; reviewed and interviewed dozens of companies about their experiences in starting and growing their businesses; and interviewed caregivers to learn more about the obstacles they face.

We also held a roundtable in March 2021 with leading executives of companies that address the needs of caregivers and older adults, to identify the barriers they face in their effort to scale and reach the people who would benefit from their products or services and to gather their recommendations for addressing those barriers. We also evaluated the amount of capital invested in the past decade and the most active investors in supporting caregiving innovations, and we identified market needs and gaps that would benefit from further innovation and investment support.

Insights were also obtained from a review of the existing network of state and local caregiver resource centers and initiatives, as well as policies that have been implemented in some states to support caregivers. The <u>Appendix</u> contains these reviews.

As Americans continue to live longer, most adults will need some kind of care as they age. This reality presents challenges for the underdeveloped market and missing caregiving infrastructure in the U.S., along with growing opportunities for caregiving innovations.

Needs and Opportunities

The data points on the following page spotlight caregiving needs and business opportunities that will continue to grow in the coming decades. To better understand the challenges and pain points of the unpaid caregiver, we identified three types of Caregiver Journeys and the associated pain points experienced by most caregivers of older adults and their recipients. Section II provides those insights.

Key Demographic Findings



The number of people age 65 and older in the U.S. has **increased steadily** during the past century. Growth has accelerated since 2011, when baby boomers first started to turn 65.



Between 2020 and 2060, the number of older adults is projected to increase by 69 percent, from 56.0 million to 94.7 million.



The number of people age 85 and older is projected to **nearly triple** from 6.7 million in 2020 to 19.0 million by 2060.



Nearly one in five (19%) are providing **unpaid care** to an adult with health or functional needs.



More Americans (24%) are caring for **more than one person**, up from 18% in 2015.



More family caregivers (26%) have **difficulty coordinating care**, up from 19% in 2015.



More Americans (26%) are caring for someone with **Alzheimer's disease or dementia**, up from 22% in 2015.



More Americans (23%) say caregiving has made their **own health worse**, up from 17% in 2015



Family caregiving spans **all generations**, including Boomers, Gen-X, Gen-Z, Millennials, and Silent.



61% of family caregivers are also working.



47% of adults in their 40s and 50s in the "sandwich generation" are caring for both a parent who is 65+ and a child.

Financial Impact



75% of family caregivers incur **out-of- pocket costs**, with an average spend of \$7,400 per year, and up to \$13,000 if they live an hour or more away.



Of those who have paid work in addition to unpaid caregiving responsibilities, 37% report **quitting their job** or giving up hours.



Those who do leave the workforce to care for an adult family member **lose over \$300,000** in lifetime wages and retirement benefits.



Women are three times as likely as men to quit their jobs to take care of a family member.



Unpaid family caregivers deliver **34 billion hours** of care to older adults in the U.S., valued at \$470 billion.



The **Covid-19 pandemic** increased the number of women who left the workforce to serve as unpaid caregivers, forgoing salary and benefits.

Impact on Caregiver Health



Long-term caregivers have **lower life expectancy**.



40% feel **emotionally stressed**, with one in five reporting financial problems.



Covid-19 exacerbated the family caregiving crisis; 31% of unpaid caregivers for adults reported having seriously **considered suicide** in the 30 days before completing a CDC 2020 survey.



SECTION II

THE CAREGIVER JOURNEY AND PAIN POINTS

"Everyone overnight became a remote caregiver due to Covid – it didn't matter whether you live next door to the person you're caring for or you live 10,000 miles away." —Executive Roundtable participant

Who is a caregiver? Most will be an adult caring for an aged parent, although they may not self-identify as a "caregiver" per se, associating the label only with paid professionals who have formal training. Yet, as we now know, there are more than 48 million unpaid caregivers in the U.S. for older adults. Most consider what they're doing a part of their responsibility or duty as a daughter, daughter-in-law, son, son-in-law, grandchild, niece, nephew, or friend.

According to the Rosalynn Carter Institute for Caregivers, a caregiver is "a person who at any time in the last 12 months provided unpaid care to a relative or friend to help them take care of themselves, e.g., helping with personal needs or household chores, managing finances, arranging for outside services, or visiting regularly to see how they are doing."

Caregiving involves a range of tasks and responsibilities that can include financial assistance, providing healthcare, and helping with one or more activities of daily living. These can create a variety of Caregiver Journeys.

Types of Caregiver Journeys

We have identified three major types of journeys and pain points that the unpaid family caregiver for an older adult often faces:

1. The Information Journey: The Caregiving Journey often begins with an Information Journey. Information and resources about caregiving are currently siloed in dozens of different websites, newsletters, resource centers, and local and national organizations. Although there are many excellent resources, as we will discuss, finding them and curating them are two key challenges. There is simply no Yelp or Airbnb with ratings for unpaid caregivers to rely on.

Care recipients have varied needs and situations, which makes the journey unpredictable. Moreover, caregiver experiences and a varied knowledge base impact their ability to access information and services successfully, to support the specific needs of their care recipient in different stages. Language barriers also can impact the caregiver's Information Journey.

- 2. The Care Coordination Journey: Each family caregiver or, ideally, the entire family will need to establish a care system that prioritizes the dignity and desires of the recipient. This involves a significant amount of coordination, combining a variety of services, as well as identifying paid and unpaid sources of assistance. This care system can change frequently, as the needs of the recipient will change as a result of different health and medical conditions. The Care Coordination Journey requires:
 - Understanding the health, medical, and functional needs of the care recipient and knowing that it will change often over time.
 - Determining who will provide these services and how to integrate the older adult's health directives and wishes.
 - Identifying who will pay for the services, products, equipment, food, and supplies provided.

3. The Quality-of-Life Journey: Caregivers are frequently caught in a bind between attending to the needs of the care recipient and their own needs and responsibilities. Sustaining and preserving the health, wellness, and financial and job security of the unpaid caregiver is critical to the quality of care the recipient will receive. There is a growing recognition of the need to address caregivers' social isolation and to provide respite and backup care, so they can preserve their own physical and mental well-being. Companies are emerging to address these needs, and some employers are developing benefits to support caregivers.

Challenges Faced by Caregivers and Recipients

"My sister and I spent weeks researching different types of resources and options for our father. It would have been great if there was a central resource to navigate this." —Caregiver interview, 2021

Unlike caring for children, for which there are a plethora of books and products to help as they grow ever more independent, no such comprehensive literature or platform exists for caregiving at the other end of life, when independence declines over time. It is common to go from one new health and caregiving crisis to another, requiring different types of support and care. Unpaid caregivers are neither prepared to handle this progression nor equipped to find the answers to the many questions and tasks they will have.

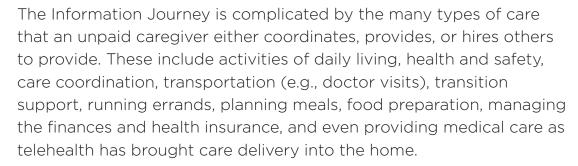
The Information Journey often leaves the caregiver awash in information and exhausted by the research alone. There is currently no curated national, centralized resource where caregivers or recipients can easily learn about the resources available by entering their diagnosis, functionality, or care needs.

For example, the National Institute on Aging and National Institutes of Health have excellent resources on their websites, yet the average caregiver or care recipient is unlikely to know this information exists. Some states have established caregiver resource centers with their local Area Agencies on Aging, while others have developed Healthy Aging Cities approaches and Master Plans on Aging.

Similarly, start-up companies such as Carely/Caregiving.com, Seniorly, A Place for Mom, Cake.com, Wellthy, Cariloop, Homethrive, Helper Bees, and others reviewed in this report also provide information to help caregivers. But here too, caregivers often do not know where to look to find these companies and their free information resources.

The <u>Appendix</u> lists many free resources provided by federal and state governments, as well as private companies, to assist caregivers in their Information Journey.

Common Responsibilities of an Unpaid Caregiver



There are specific daily tasks that a person must be able to do in order to maintain their full independence. These daily living activities are frequently broken into two groups: Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs).

ADLs are basic self-care activities that people perform on a daily basis in order to live independently, including mobility, dressing, eating, personal hygiene, and toileting.

IADLs are tasks that do not necessarily have to be done every single day, such as shopping, meal preparation, housework, money management, transportation, medication management, and communication.

As people age and enter different stages, the ability to independently complete their ADLs and IADLs commonly begins to diminish. This may be a result of the natural progression of aging, be related to a health condition, or be caused by the cognitive and physical decline associated with Alzheimer's disease and other forms of dementia. The ability to perform IADLs independently generally declines earlier than the ability to perform ADLs. A person with two or more ADL limitations is generally considered in need of caregiving.



Activities of Daily Living (ADLs)

- Mobility
- Dressing
- Eating
- Personal Hygiene
- Toileting

Instrumental Activities of Daily Living (IADLs)

- Shopping
- Meal Preparation
- Housework
- Money Management
- Transportation
- Medication
 Management
- Communication

There are several different types of ADL and IADL assessments used by providers to determine eligibility for certain types of benefits with Medicare and Medicaid, and for determining the type of caregiver tasks that will be needed. These are listed in the <u>Appendix</u>.

Each caregiver will be faced with many tasks over the course of their Caregiving Journey, many of which occur on a daily or weekly basis. We have included this list to illustrate the magnitude and range of responsibilities and needs that define the caregiving experience. In some families these tasks are distributed, in others it becomes the role of one person – not always by choice or design. For those able to afford it, professionals and companies can be hired to assume some of these care needs:

- **Daily Essential Activities:** Meals and food preparation, home and personal care, home repair, delivery, transportation services, errands.
- **Health and Safety Awareness:** Health vital alerts, diet and nutrition, medication management, personal safety monitoring, telehealth, and providing healthcare at home.
- Care Coordination: Care planning, care professional engagement, records and benefits management, recovery support.
- Transition Support: Home retrofit services, long-term care insurance planning, long-term care provider referral, legal assistance, hospice and end-of-life care planning, funeral and burial planning.
- Social Well-Being: Digital inclusion, life enrichment, empowerment, community networking, life companions.
- **Financial Caregiving:** Caregivers may be responsible for helping to manage the finances of their care recipient, often contributing their own funds to pay for food, medication, and necessary services.

Each of these challenges presents opportunities for solutions to be developed by innovators, and each represents a large market opportunity. Hundreds of companies have already been started to address one or more of these challenges, few comprehensively thus far. We see a huge missed opportunity to connect these new products and services to the caregivers and recipients who would benefit from them, caused by the lack of effective channels for distribution.

These challenges are also often exacerbated by the impact of specific diseases such as Alzheimer's and other dementias. The <u>Appendix</u> outlines the additional care requirements for those with serious illnesses. The complex components of each care recipient's needs change over time. A fall can require rehab, and mobility challenges may improve over time or may lead to a spiraling of hospitalizations, followed by decline. This complexity requires a tailored, curated approach to both understanding the needs as well as identifying solutions.

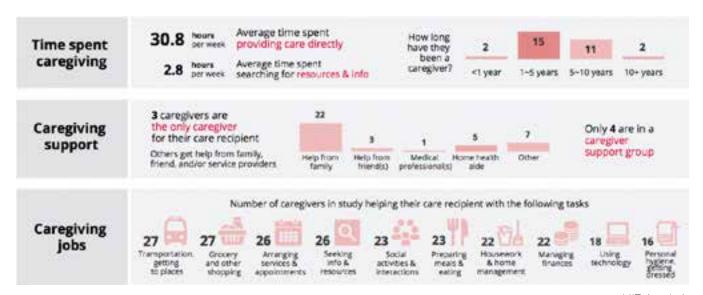
We include attending to the needs of the caregiver and their quality of life as an important domain for market attention and innovation. The impact of Covid-19 on caregiving was assessed by the Rosalynn Carter Institute for Caregivers, which found that 83% experienced increased stress related to caregiving since the start of the pandemic. Those surveyed expressed a need for more support than they were getting in five specific areas: Respite and Day Care, Financial Assistance, Social Interaction, Peer Support and Self-Care, and Clinical and In-Home Care Services.

A Day in the Life of a Caregiver

The MIT AgeLab undertook a study of 29 employed family caregivers providing unpaid care to an adult family member over a period of three months, to better understand a typical day in the life of a caregiver. What tasks and responsibilities pose the biggest burden? How does caregiving affect an individual's health and well-being? And where do caregivers need help?

This graphic illustrates the range of tasks unpaid family caregivers commonly provide, including transportation, grocery and other shopping, arranging services and appointments, seeking information and resources, social activities, preparing meals, housework and home management, managing finances, tech assistance, and personal hygiene and dressing.

Mapping the Caregiving Journey



MIT Age Lab

The AgingWell Hub at Georgetown University also developed an excellent Caregiver Journey Map supporting those with Alzheimer's and other dementias, matching the stages of caregiving to the stages of Alzheimer's disease. (Available in the <u>Appendix</u>.)



SECTION III

THE INNOVATOR JOURNEY AND PAIN POINTS

"It's a hard story. It's hard to tell a start-up and investors that it's going to take five years to get into the health insurance market."

—Executive Roundtable participant

To better understand the successes and challenges that innovators have encountered, we conducted three initiatives: Data Gathering; Identification and Analysis of Market Challenges; and a Convening of Caregiving Innovators to garner their perspectives firsthand.

Data Gathering: First we set out to understand which companies are serving the needs of caregivers and recipients in the United States. We reviewed six sources of data on companies: AARP; the Aging 2.0 Caregiving Collective – companies focused on grand challenges in aging; Pitchbook News; TechCrunch; the Gerontechnologist; and the Longevity and Tech Report.

We assembled a database and found nearly 800 companies devoted to assisting older adults in the United States, about 300 of which focus on one or more aspects of caregiving needs. In addition, there are dozens of nonprofit organizations, state and local agencies, and community-based programs that support older adult needs and caregivers. Many provide valuable and needed services. However, many do not scale or reach enough of their intended target audience. The Appendix contains links to these sources.

Identification and Analysis of Challenges: We conducted an extensive review of the companies, programs, and providers of innovative solutions to address the multitude of needs related to caregiving. We set out to find those that had achieved scale and those that had not, with the hope that the information would benefit future innovators, and to determine whether there were any trends or systemic barriers that could be addressed. We inquired about products, services, customers, customer-acquisition strategies, sales and growth histories, and common obstacles in the caregiving sector.

Interviews with companies identified several major obstacles, including:

- Customer-acquisition challenges; it's difficult to identify family caregiver
- Distribution channel challenges; there's no direct-to-consumer marketplace
- Funding from early-stage investors
- Fragmented healthcare channels
- Payor system complexity
- Lack of accessible platforms or marketplaces
- Policy and regulatory limitations

Spotlight on Caregiving Innovators





Carallel

Calabe office a progner support solution that combines digital trafe with personal publishes from senior case.

Caraltel

Later Printed







(Care.com

special results sain, booking, per sain.

Cars.com

SHIP WILL



Card in a 19744 compliant stable transmissions and tracing platform for people repealed by the arrisp determinant of health, and the provider

Hospital and Louis

(Liver Stry

ATTACA TO \$1000

Carely

Serious A.

care3 ® CareAcademy

CareAcademy

Sentant.

Darles A



Constructoring is a SUR position grander authorize flassed prifine disease to feel direct care workers provide acceptors

care and improve their lives at home:





Senanth Special Review Ac-







Carefuge is caregiong securital, exists, is an futurement transpare, conducting & Caregioning positions. A family's without paragroup assistant.

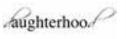
Mani buch



tierly gare-barries its

Cirry







Carloss Digital positions that theires across care and denote processes to epolly and solid effectively delined with pathents. High Starking ton

Date fair perferent.



Carls is a factorology company

Donker. Smarth (pent Series &)



Cerest Heath pare for a linear pile who helpe on you, as

Carnost therty para-horses All

Daughterhood and build confidence of account who are managing their parents' years. The daughterhood tong, welcome and account

Name and Add.

and vetual teathques for people of all ages in the cumbert of their own home offers an element headtown for people

Disputch Health

Named

Small post Series &



Homage

homethrive honor



Embodied Labs

Emission Life is an inventive tracking station that ingresses outcomes in training assistances, and family and paraginar augusts. The company's goal ...

Lin Avgenti

Early gro-duras 4).



Historiage is a complete substant that continues technology and the best core professionals to whatte sentials to age all home with algority

Sequent.

Details (post-factor A)



.....

Homeforius is a facility when come coordinate that reduces the soon, worry, and stress on engineer lamby compliant who support aging loved ones loving at ...

Serves A

record to a home called authorities company that partners with local approve to provide reliable, high-quality to-home care. The company provides ...

When John Property laws

San Francisco

Droots past Garier Al-

KindyCare

Drifter claim marketippians with more folice refled congivers and service provides. The periodic case managers, have core agencies, pleciment specialists, etc.

San Francisco.



Kirts

etons to have in-help you new better Campusy with Kinty are given the support they read through a set of useful digital tasks and above to a remanding.

Contrologic

See Build



Unit

Littled only accept the treat Carent Play, equal Ceres, with incoming technique as they can focus on delivering arracing care. Chief provides exceptional care L.

High Steel Holina corp.

Early gave during Ay



Plays corrects College Students to Obbi-Abolis who read postorative with beroporteriors, forces physics, becomings

High Deve arrange on

Marri

Small part fame to





bearing comparisonsing, and other sent.

Rootek

Number provides prime back to built aging solutio and their territies make a officined and engineeral leadit and see decision with conty and ...

improvink conf.

Dutters being &

SeniorCiril

Securities provides sections, exposel and Sectionings that arranges havely temperature.

Management and State Comp

-

Snorth book Series IV



1Care

TORRE's Marketin agreement, family platform resisces company formand and delices repring forme processors. TORRE's protection based production technology.

tarry bee deres No.

Tending

Tairding

A convenient, seep to use, lone stop whose for family compliant, supporting and paring for level area.

then there was

High Sweet size throstop cond

Annual Property (wy bre-been A)



The Helper Book

The Holper Basis is an insurface. minerally improving the home is no experience for the paper and care-recipient. They exist with some of the

Combine

Series A.



TorchLight.

Tig US companies sin Techtight's digital platform and expert extracts to educate and enquires enightypes to reache modern transporting (failinges).

Maria Devenior Degle Carachina Areas

11147-010404



True Link

True care posterior assesses from Decuming outlines of flexal, resembly fruit, and assess the providing financial cools for other askats and their families.

Hope Stewart against Street and Lorent

browth (post-barres to



more realitions is an intentity leading sectionings and clinical services organization, deployment to community, complete trapping to the sent of the care.

West Calculate of Care cont.

Same Tork

Sixty (pre-Sween A)



Smooth (peop Service A)



At Tailtin, we down in the day when taking you of the sick and the sistery. becomes searchestly burner and tests, powered. We've stocking hard to hardone.

Sins tork



Lessons From Companies and Innovators

Some lessons from the companies we interviewed and reviewed include:

- Know which customer you want to acquire and recognize that not all 75- or 85-year-olds are the same. This is a very heterogeneous market. The adage "If you've seen one 85-year-old, you've seen one 85-year-old" is true.
- Recognize that the payor of the product or service is not always the end user, and you may need to pivot your business and customer acquisition strategy to the payors.
- Don't over-engineer your product initially it will undoubtedly undergo several iterations.
- Direct-to-consumer can be difficult initially. You may need to pivot to sell your technology to other organizations or companies in order to service the end user.
- The long sales cycle within healthcare organizations is real. You will need a champion.
- The older population under 75 is very amenable to using technology, but over 75 they are not as fluent - yet. This is likely to evolve as the tech-educated population ages, highlighting the importance of digital literacy in older adults throughout their aging years.

Those companies that were not able to scale also provide valuable insights, and we reviewed dozens of home care companies that folded. They echoed the importance of the market opportunity to facilitate access for older adults to products and services. The experience of Tending, which provided support services for care transitions from the hospital to the home for Medicare patients is instructive. They found it hard to get hospitals to pay for that type of service, and they needed stakeholders in the hospital to get in the door. They also noted that it was hard to scale, and that Medicare Advantage had a long sales cycle. Families who needed the platform and support liked it, but the company found going direct-to-consumer was hard.

Convening of Caregiving Innovators: To develop frameworks for solutions and recommendations for innovators, entrepreneurs, and policy-makers, we convened a roundtable collaboration with the Aging 2.0 Collective in March 2021, with 15 leading caregiving executives. The goal was to have a candid conversation about the challenges they face, discuss what they would recommend to future innovators, and identify support and solutions for next-gen products and services. We asked a simple question: As a community that cares about supporting family caregivers, what can we do to help your business grow?



A brief description of each company, including who they consider as their paying customer and their customer-acquisition channel is included in the <u>Appendix</u>.

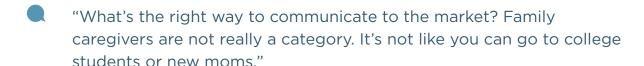
Common Obstacles to Growth

These executives identified key pain points and obstacles that affect the caregiving industry and their ability to grow and scale. Summarized below are highlights from that discussion and important insights for new entrepreneurs and innovators who want to address the growing needs of family caregiving:



1. Distribution and Channels

- We are missing direct-to-consumer channels.
- People who are caregivers or receiving care are in different phases of life, and there is no obvious channel to reach them.
- Compounding the lack of channels are negative stereotypes and language.
- Even start-ups that sell to systems (such as other healthcare plans and employers) may have to drive enrollment themselves, and finding individuals with the need is very costly.
- Channels are fragmented. Health plans and government programs are generally administered at the state level, so there is not a common market.
- Varying state and local health policies, practices, and channels can paralyze scalability and growth and affect distribution, customer acquisition, and sales.



"It was brutal, the cost of acquisition doing AdWords and Facebook ads to get app downloads. It's like five times more expensive than what you read about."

"We don't think we can get consumers to pay for this directly. And trying is really detrimental to the product."

"So when we open a state, we have worked it for 24 months. The barriers to entry to open a market are pretty high."



2. Health System Design

- Family caregivers are often not part of healthcare teams. This results in a lack of integration and data sharing among solutions. Vendors are generally siloed and not used to collaborating with others to create a holistic, whole-person solution. This is changing in some systems; for example, in California and New York, Medicaid dollars are being used to pay family members to deliver care. Vesta Healthcare's business strategy is to include the family caregiver as an essential component of the care team.
- Incentives are misaligned. The health system benefits from free caregivers. Plans won't advertise services that are too good, for fear of attracting too many people with specific conditions.
- Most of the \$3.7 trillion healthcare industry is sick care, not healthcare – nobody's responsible for keeping people healthy at home.
- "The thing that's going to either drive us crazy or forward is the willingness of those that own the risk to mainstream the family caregiver as part of care planning."

"Family caregivers are a free resource for the providers."

"Why not pay people's families \$100,000 if they don't deviate from their palliative care plan [and not go into the hospital]?"



3. Market Awareness

- Caregivers lack awareness of services that can help them.
 Likewise, potential entrepreneurs and investors do not recognize the size of the business opportunity.
- Family caregivers are not identical and are too busy (and often exhausted) to share their perspectives, which means innovators may end up working on non-essential problems.
- Data generated in the home setting is not being captured and leveraged, missing an opportunity for feedback loops.

- Caregivers are difficult to identify. People generally don't selfidentify as caregivers, and the term "caregiver" has multiple meanings and can include members of the care team who provide care remotely.
- Hospital stays are counted as GDP, but caregiving isn't. As such, the space doesn't attract sufficient government or investor attention.
- "What's happening at home is structured data that can be used to deliver better care, whether it's interactions or even interventions to avoid poor outcomes, but it's a blind spot right now."

"It's challenging to track environmental conditions, undocumented events like hidden falls, and key data points, which we need to provide preventative care."

"There's a huge gap in how you find a caregiver; there is no direct path. Identifying who the caregivers are feels like a big barrier for all of us that are trying to work in this space."

"People don't identify themselves as a caregiver. They say, 'I'm a daughter. I guess I'm doing caregiving, but I'm a daughter.""



4. Market Maturity

- Impact metrics are lacking. Without good data, it's hard to prove results. This is especially problematic with Medicare Advantage plans that are looking for cost savings and with employers who want to see the impact of employee programs.
- The dearth of metrics, including ROI, creates inertia and slows innovation and partnerships due to uncertain impact and outcomes.
- "The concrete ROI is still being worked out. There's still pilots and experiments being run on which benefit represents the biggest ROI and gets the best feedback from members."

"We need to show significant cost savings the way pharmaceuticals need to show drug efficacy."



5. Policy

- Family leave and support for caregivers is inadequate or nonexistent. Funding and legislation for programs with government and employer support would ensure there is more demand for family caregiving solutions.
- Institutional and legislative policies can "raise all boats" and provide funding to increase business opportunities and ensure quality support to family caregivers.



6. Funding

- Capital availability is an issue. Family caregiving is not well understood compared to other tech sectors and is not always seen as relevant by young entrepreneurs and investors.
- Too little "patient capital" is committed compared to the scale of the challenges to be overcome.
- "It really doesn't come down to a lot of funding support for caregiving-specific products. There's less shiny, fascinating objects like robots or other gadgetry."

"We need really consistent, long-term backing. There is a level of steadiness that needs to be applied."



7. Product Mix

- Every solution is complex. With caregiving, every situation is unique and requires a personalized set of providers, so every family ends up creating their own system. (This differs from the more "standardized" childcare industry.)
- Further, the need is episodic; periods of crisis are mixed with periods of calm, undermining subscription business models.
- "It's hard to sell things to families when every family is literally creating an entire delivery system, all by themselves, over and over again."

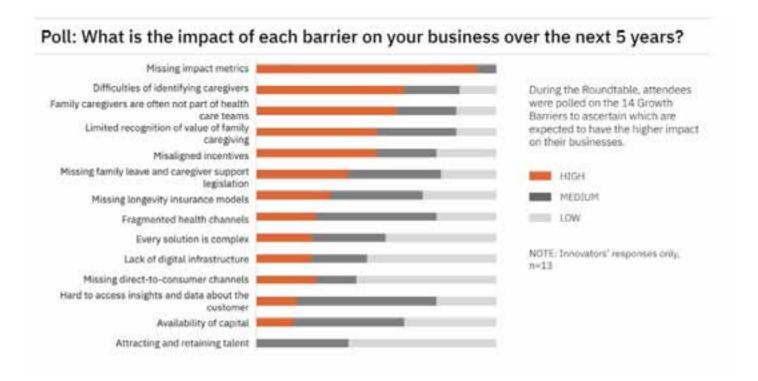


8. Staffing

- Attracting and retaining talent is a multifaceted challenge. Frontline professional caregivers are needed as well as coordinators with expertise in managing complex, dynamic situations.
- There is insufficient supply for ever-increasing demand.
- Dynamic, ambitious entrepreneurs tend to flock together and follow each other to new opportunities. Several of the companies interviewed that did not scale found hiring the needed talent to be a barrier to their growth.
- "You need to attract talent that is able to manage complex life situations with multiple actors."
 - "Challenges include planning for a labor pool of insufficient size and necessary skill."
 - "The challenge includes addressing a complex and outdated regulatory system."
 - "Family caregivers are interfacing with a fundamentally broken and disintegrated governmental system that is central to the financing of a lot of the care delivery system."

Relative Importance of Barriers to Business Growth

We then asked the executives attending the roundtable to evaluate the impact of each of the barriers on their business over the next five years.



Recommendations From the Roundtable

Discussions among the participants also focused on opportunity areas to address these barriers to growth and how we might go about it. Notably, those who have found a successful and scalable customeracquisition model by selling to Medicare Advantage or employer plans said they would not want to pivot to direct-to-consumer.

As one CEO stated, "It costs me money after the third family member I have to speak with. It is just too hard. I need to meet them where they are - through their employer."

Of course, that does not address the needs of the millions of unpaid caregivers who have had to leave the workforce, or whose employers do not yet provide such benefits, or whose Medicare Advantage plan does not cover the types of support they need. Participants identified five key opportunities for growth. Highlights are below, and more detail can be found in the Appendix.

KEY OPPORTUNITIES

Define Caregiving

- This is about bringing family caregivers who keep society running – out of the shadows. It involves creating new ways of identifying caregivers and establishing standard terminology to describe caregiver roles and tasks.
- We need to redefine what makes a caregiver in light of current family configurations, in which nuclear families are in the minority and family members often live far away. And we need to better capture the contributions (tangible and intangible) of caregivers, both paid and unpaid. It should be easy and rewarding for caregivers to share information and, in turn, to get the support they need.

Measure Impact

- We need to agree on metrics and measure how innovations impact customers, payors, and care recipients.
- Start-ups face high bars to not only build differentiated solutions but also prove their efficacy in terms of cost savings and societal impact. Many start-ups that have pivoted to B2B customers – particularly health insurance plans – are asked to demonstrate impact on health outcomes as well as cost savings.
- Few organizations are willing to spend on solutions with unclear financial or impact ROI, or to invest in enabling the space to make it easier for companies to prove value.
- Develop relationships with clinical partners to enhance demonstrating health outcomes.

Fix B2C

- The majority of family caregiving is inherently local centered around the home fragmenting both demand and supply.
- Each family caregiving situation is unique, with bespoke needs and solutions, also localized.
- The majority of start-ups we interviewed had pivoted away from B2C channels, as the costs were too great and the market too fragmented.

- As a result, most start-ups target health insurance or employer channels to gain access to volume, but this comes with its own costs and complications.
- Moreover, not everyone has access to these B2B channels.
- As people are in different stages of life, there is no obvious channel to reach them. It's not just one demographic bucket.
- A patchwork of healthcare providers, community organizations, and informal care providers is involved, all "owning" pieces of the puzzle.
- There is no easy way to find out what's available for specific needs in a given location (and not, e.g., just the preferred choice of a health plan case manager).

Create a Solutions Marketplace

- A properly functioning consumer marketplace would connect families and innovators directly. To do this we need to facilitate both demand and supply.
- Public-private partnerships will play a vital role in building this marketplace, and greater government investment in aging-services infrastructure will be needed.
- Families need a resource that lists all solutions available in a particular area that can be filtered based on their unique needs.
- Solution providers will be incentivized to own their organization profiles and keep their service availability up-to-date.
- There is plenty of innovation but no overall system to support family caregiving.
- Longevity insurance is needed to promote independence.
- Older adults who age successfully in their homes save the health system money, but they face significant out-of-pocket costs themselves.
- Medicare doesn't routinely cover these costs (Medicare Advantage does in very limited circumstances), and private insurance options are generally unavailable or unaffordable.

- New "longevity insurance" models would combine services to keep people healthy and independent as long as possible with an insurance payout that covers community-based services.
- One product could be "aging-in-place insurance" that rewards people for living independently. Customers could pay premiums while still in the workforce and after a certain age have access to products (e.g., smart-home devices, home modifications), services (e.g., home caregiving or care coordination), or a financial payout based on longevity.
- While no country has achieved an ideal solution, Germany, Japan, and Taiwan offer lessons in providing low-cost, universal coverage, with good user satisfaction and community support.

Next Steps in the Innovator Journey

The roundtable helped to validate the pain points and challenges we identified in our review of companies that have failed, as well as some of the struggles of those that are thriving. Collaborative opportunities among all who are trying to solve the challenges of family caregivers were of great interest among the executives at the roundtable as well as those interviewed.

Clearly, addressing this enormous challenge facing virtually every family in America today requires innovation. It will also require public-private partnerships to help fill the gaps resulting from the lack of meaningful action at the federal level. Part II of the report considers a blueprint for this type of framework.



SECTION IV

MAPPING THE INNOVATIONS LANDSCAPE

"What's the right way to communicate to the market? Family caregivers are not really a category. It's not like you can go to college students or new moms; family caregivers are cross-cutting from a demographic perspective." —Executive Roundtable participant

The caregiving sector encompasses products and services to assist the caregiver and the care recipient, as well as products and services for the companies that employ caregivers and provide home care. Our review found that more than 300 companies have been launched in the past decade (or have developed a new focus in this area) to serve the needs of caregivers and recipients. We include attending to the needs of caregivers and their quality of life as a critical domain for market attention and innovation. There are four key challenges an entrepreneur may face in developing companies to address the many different needs of older adults and their caregivers.



Challenge 1: How to Segment the Market

Mapping the current landscape of caregiving innovations begins with identifying the many different domains related to caregiving pain points and needs, and evaluating available solutions in the marketplace. Among these are:



Most companies focus on one or two of these needs; only a few provide integrated and coordinated solutions for the multiple needs of care recipients and caregivers alike. More detail is included in the <u>Appendix</u>.

We reviewed four leading sources which take different approaches to segmenting the market of caregiving needs and highlighting opportunities. Several subdomains are common to all four market-segmentation approaches, and in fact most could be categorized in one of several major bucket areas. There is no right or wrong here. Our goal is to understand the complexity of needs, the vastness of the market opportunities for innovative and integrated solutions, and the myriad of investment and business opportunities.

A comparison of these four approaches shows the following trends:

AgeTech	Aging 2.0	AARP	Techstars
For Caregivers	Caregiving	Caregiver Quality of Life	Caregiver Support
Wellness	Care Coordination	Care Coordination	Care Coordination
Health	Financial Wellness	Health and Safety Awareness	Preventive Health
Insure Tech	Daily Living and Lifestyle	Social Well-Being	Financial Wellness
Social and Communication	Mobility and Movement	Daily Essential Activities	Social Engagement
For Senior Living Communities	Engagement & Purpose	Transition Support	Aging in Place
Cognitive Care	Brain Health		
End of Life Planning	End of Life		
For Healthcare Providers			
Retirement 2.0			
For Home Care Providers			
Tech-Enabled Home Care			
Independence			
Legacy			
Housing			



Challenge 2: Identifying Market Opportunities

Because needs vary among a diverse population of care recipients and change at different stages of their journeys, it is important to develop strategies for effective solutions. These apply to business, policy, and funding.

Caregiving innovations encompass products and services intended to assist caregivers, care recipients, healthcare providers, and employers of caregivers.

The Future of Longevity Accelerator

Launched in 2020, the Future of Longevity Accelerator focuses on innovative solutions to address the unmet needs of older adults and their caregivers. Run in partnership with Pivotal Ventures, the Accelerator's program themes for the upcoming 2023 cohort of companies that will be selected include:

- Caregiver Support: Support for family caregivers, including education, tools, respite care, and social support, and solutions for formal caregiving to address staff shortages, training, and care management tools.
- Care Coordination: Solutions that address the complex and fragmented nature of the healthcare system, particularly for older adults with multiple health conditions. These include care transition, clinical collaboration, medication management, remote care delivery, and care navigation.
- Aging in Place: Solutions that make it easier for seniors to remain in their homes as they age, including home retrofitting and accessibility, smart-home devices, assistive robotics, fall prevention, home care, health monitoring, digital accessibility, meal prep and delivery, emergency response systems, inclusive design of everyday devices, and general support for daily living.
- Financial Wellness and Resilience: Solutions for financial security through longer lifespans, including financial planning, later-life employment, retirement planning, fraud and scam prevention, longevity insurance, financial monitoring, and end-of-life planning.
- **Preventive Health:** Solutions to support fitness, nutrition, wellness, behavior change, physical therapy, cognitive health, chronic disease management, digital health, and wearables.

• Social Engagement: Solutions that address purpose, fulfillment, and community engagement for older adults, including social connection, social determinants of health, and overcoming isolation and loneliness.

The concept of aging in place covers a broad range of needs for the more than 90% of older adults who want to remain in their own home (or a different home), rather than entering an assisted-living community or group-living setting.

With that desire comes the need to create a variety of structures and ecosystems to support their life course at the different stages that an older adult will face until they die. For those who move to a nursing home or assisted-living community, a care assessment and a care plan are provided from day one, and facilities are equipped with accessibility features, caregiving infrastructure, and personnel trained for meal preparation, housekeeping, laundry, transportation, social connections, activities, entertainment, and assistance with activities of daily living.

For older adults who choose to age in place, the planning has to start from scratch. More creativity and innovation is needed to address the challenges of aging in place, accommodating evolving needs and providing an infrastructure and care systems that do not exist in individual homes. Given the breadth of adaptations and services needed, we do not consider "aging in place" a useful category for identifying caregiving needs. There are multiple business opportunities, price points, and approaches to these innovation gaps and opportunities, described in greater detail in the <u>Appendix</u>:



Fintech Solutions to Prevent Financial Elder Exploitation



More Housing Alternatives and Intergenerational Housing



Longevity Health Services in the Home



Digital Health and Wellness Tools and Assessments



Housing and Home Modification



Multigenerational Teams



Platform Development



Challenge 3: Understanding the Customer and Distribution Channels

As in much of healthcare, the customer is not always the end user of the product or service, and the payor is similarly not always the care recipient or caregiver. Understanding the characteristics of the payor as well as the end user is essential both in developing an effective business strategy and in meeting the needs of care recipients and their caregivers. It involves services purchased directly by the recipient, services purchased on behalf of the recipient, and services paid for by society, including government-sponsored plans. The customer base is very heterogeneous and often misunderstood.

While the end user of caregiving products and services is most often either the care recipient or the unpaid family caregiver, the payor may be one or more of the following:

- Healthcare plans
- Medicare Advantage plans
- Medicare and Medicaid services
- Employers and benefit programs
- The caregiver
- The family
- The care recipient
- Healthcare providers

The U.S. lacks universal health insurance, and healthcare is paid for through a bewildering mix of public and private, for-profit and nonprofit insurance plans and healthcare providers. The federal government funds Medicare (for adults 65 and older and some persons with disabilities) and Veterans Administration health benefits. Medicaid, for qualifying low-income persons, is funded by federal-state partnerships. There is no universal coverage for long-term care services.

Glossary

Private insurance is the most common form of coverage, accounting for two-thirds of Americans (67%). The majority of private insurance (55%) is employer sponsored. Public and private insurers set their benefit packages and cost-sharing structures in compliance with federal and state regulations.

Medicare beneficiaries are entitled to traditional Medicare, a fee-for-service program that provides hospital insurance (Part A) and medical insurance (Part B). Since 1973, beneficiaries have had the option to receive their coverage through either traditional Medicare or Medicare Advantage (Part C), whereby people enroll in a private health maintenance organization or managed care organization. In 2003, Part D, a voluntary outpatient prescription drug coverage option provided through private carriers, was added to Medicare coverage.

Medicare Advantage: In 2018 and 2019, the Centers for Medicare and Medicaid Services (CMS) expanded supplemental benefits that Medicare Advantage organizations can offer enrollees to include adult day-care services, home-based palliative care, in-home support services, support for caregivers of enrollees, medically approved non-opioid pain management (e.g., therapeutic massage), a stand-alone memory fitness benefit, home and bathroom safety devices, home modifications, transportation, and over-the-counter benefits.

Medicaid: The largest insurer in the U.S. covers 72 million Americans. While it is a needs-based healthcare program for people of all ages, it uniquely covers the costs of long-term care for seniors and disabled individuals who meet their state's eligibility requirements. Traditionally, Medicaid's coverage for long-term care was restricted to institutional care, often referred to as "institutional Medicaid" or "nursing home Medicaid." In this setting, Medicaid covers the cost of room and board, assistance with activities of daily living, skilled nursing, and medication administration. Nursing home Medicaid, which must be provided in a certified nursing home facility, is an entitlement for anyone who meets the eligibility criteria.

Implications for the Reimbursement Process: There is growing demand for the adoption of value-based payment approaches in Medicare and Medicaid that enhance accountability for healthcare cost, quality, and equity. Part of the impetus behind this is the growing recognition that Medicare faces insolvency as soon as 2024, and Medicaid accounts for an increasing share of state budgets. Thus, any new product or service that desires coverage and reimbursement by Medicare or Medicaid should be incentivized to demonstrate value for payment and metrics to support that.

Employee Assistance Plans: Companies have begun to face a growing threat to their worker productivity, employee retention, and ultimately competitive advantage: the needs of employees who are caregivers. Factors such as an aging population, an increasingly female workforce, and a competitive job market made supporting caregivers a critical talent-management issue even before the Covid-19 pandemic.

These changes are leading more caregiving companies to identify their frontline customers as employer benefit plans who purchase services that benefit their employees. Examples of companies coordinating caregiving benefits for employees include Wellthy, Cariloop, and Seniorlink.

Caregivers and Recipients: Family caregivers are the most obvious customers for products and services, but they are also the most challenging customers to reach. With over 48 million unpaid caregivers for older adults in the U.S. and over 10,000 people turning 65 each day, it would seem that you could go to any grocery or pharmacy and run into them. But from a business strategy perspective, this is the hardest customer to identify and acquire in a cost-effective manner.

There is no single profile of a caregiver and no fixed age range for a care recipient. Caregivers range in age from 20 to 80 or older. Care recipients can be employed, retired, and 50 to 100+ years old. It is therefore not age, but the stage of care needs that best identifies both caregivers and recipients. Most businesses in the caregiving industry begin with a direct-to-consumer approach. Often, after a period of time and considerable expense, they find that identifying customers through other channels is a more scalable strategy.



Challenge 4: Customer Acquisition Channels

Defining and understanding the payor, the customer-acquisition strategy, and the channel is critical for any innovation that addresses the caregiving needs of older adults. Customer acquisition is challenged by the absence of direct-to-consumer channels. Both employers and Medicare Advantage plans offer a channel to reach a large number of customers. Often, companies will use SEO and Facebook ads for direct-to-consumer, an expensive approach, as caregivers and recipients are a diverse demographic.

Selling into Medicare Advantage usually begins well in advance of Fall enrollment periods. It requires developing relationships with plan administrators and can involve a long sales cycle. These plans may look to caregiving products and services as a way of differentiating their offerings, but they increasingly demand metrics to demonstrate their ROI.

Employers and employee assistance plans may also involve a long sales cycle. Employers are beginning to offer more caregiving benefits as a way to recruit and retain talent and to increase employee wellness, productivity, and presenteeism. The metrics they care about differ from those that Medicare Advantage would use. While employers will seek to measure the impact on the caregiver, the Medicare Advantage plan will most likely look at the impact on the care recipient and their purchase and renewal of their plan.

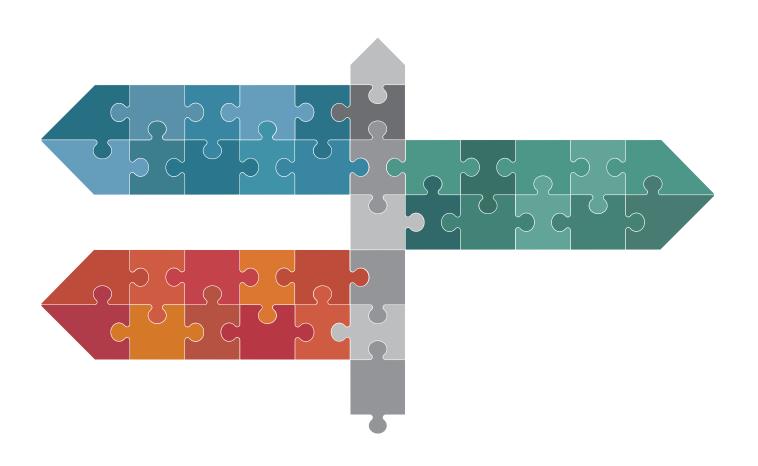
Many employers who offer caregiving benefits are looking at certain metrics to justify and measure these expenditures, traditionally between \$3.50 and \$4.50 per employee per month. Among these metrics are the health and wellness of the caregiver employee. It is well documented that over 40% have comorbidities themselves, suffer from depression, and have 8% higher healthcare costs than employees who do not self-identify as a caregiver of an older adult. Employee caregiver metrics may include paid or unpaid leaves of absence, healthcare costs, wellness, behavioral health utilization, and use of caregiving coaches.

Some of the challenges commonly faced by companies and entrepreneurs include:

- The proliferation of Medicare Advantage plans means there are many to sell to, and they often want an exclusive service or product to distinguish their offerings.
- Medicare and Medicare Advantage are likely payors. How many different points of service they will embrace is yet to be determined. Does a beneficiary get a choice of 5 to 10 products or services, or an unlimited amount going forward?
 Will employers do the same?
- Selling to employers to offer products and services as an employee benefit has a unique sales cycle. We are encouraged to see elder care and longevity benefits increasingly being offered, with recognition of their value to the employer as well as the employee.
- Each start-up needs to validate its product in either a clinical or home setting. There is no central database of clinical partners or older adults willing to try new products or services and provide feedback.

- Finding the care recipient and their caregiver is challenging. There are no central databases or platforms to identify those who need specific products and services.
- There are also no obvious direct-to-consumer channels for distribution of products and services for caregivers and their recipients.
- Healthcare providers often have limited knowledge of the array of products available for specific needs, as there are limited marketing opportunities. There is a wide range of needs in this very heterogeneous market.

Part I of this report has focused on understanding the complex pieces of the puzzle: the needs of care recipients, the Caregiver Journey, and perspectives from solution providers and innovators. Part II, which follows, lays out our blueprint for a new caregiving infrastructure to meet the needs of all stakeholders and provide real assistance to caregivers of older adults across the United States.



LANDSCAPE OF CAREGIVING INNOVATIONS: PART II

SOLUTIONS LANDSCAPE



SECTION V

MOVING FORWARD: THE FUTURE OF CAREGIVING SOLUTIONS

"There are only four kinds of people in the world.

Those who have been caregivers.

Those who are currently caregivers.

Those who will be caregivers,

and those who will need a caregiver."

-Former First Lady Mrs. Rosalynn Carter

As we learned from the Executive Roundtable, opportunities for all stakeholders to collaborate are urgently needed. Because the United States does not yet have a national ecosystem for caregiving, we are left with a complex and fractured approach to addressing the needs of older adults and their caregivers. In turn, there are multiple stakeholders and customers in the Caregiving Journey and within the marketplace, all of whom could contribute to a future caregiving infrastructure.

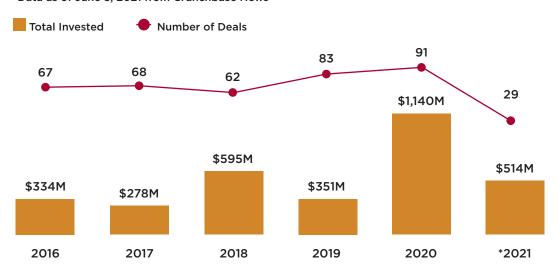
The Business Opportunity

"Caregiving start-ups are like companies selling ornaments for Christmas trees that do not exist. We need to create the Christmas tree." —Executive Roundtable participant

With 48 million unpaid caregivers taking care of an ever-increasing number of older adults – 10,000 to 11,000 turning 65 each day – caregiving is an enormous business opportunity. Over the past five years we have seen increasing investment in elder care by early-stage investors, as shown in the chart below, published by Crunchbase. In 2011, annual investment in elder care companies was around \$39 million; by 2020 it had increased to \$1.14 billion.

Funding to US Startups Focused on Elder Care, Elderly Populations, and Home Health Care





There are many, many early-stage investors, but relatively few who fully understand the opportunities associated with caregiving. Hence, they are reluctant to be first movers and will often delay entering until some "known" investor commits. There is a huge educational mission here and a need to cultivate new investors in this emerging market.

Venture investors, both within companies and with independent funds, are increasingly recognizing this enormous opportunity. Andreesen Horowitz, Blue Fund Ventures, Kaiser Ventures, Khosla Ventures, Maverick Ventures, and Oak HC/FT Ventures, to name a few, have invested in this space.

Importantly, several new venture funds have been established specifically targeting a range of aging-innovation market opportunities, such as Cake Ventures, Magnify VC, Pivotal Ventures, Primetime Partners, and Springbank Collective. The Appendix lists venture funds associated with major caregiving-related investments in the past 10 years.

While some funds search exclusively for unicorns, there are ample opportunities here for market rates of return and enormous societal impact. In the years to come, impact investors will likely be engaging in this sector – as has the Emerson Collective with its investment in Tembo Health. Aloe Care raised a round in 2021 from mission-driven investors such as City Light, the Million Lives Fund, Springbank Collective, Drumbeat Ventures, and the Innovations for Impact Fund.

In discussions with investors, we often find some hesitation to fund start-ups in this market because they are unsure of exit strategies. There have not been many exits to date, but this table lists some notable examples.

Company	Aquirer/Lead Investor	Year	Valuation	Transaction
Home Instead	Honor Technology	2021	Undisclosed	Acquisition
Current Health	Best Buy	2021	\$400 million	Acquisition
InnovAge	Apax Partners	2021	\$400 million	IPO
Caregiving.com	Carely	2020	Undisclosed	Acquisition
Care.com	IAC	2020	\$500 million	Acquisition
Almost Family	LHC Group	2018	\$1 billion	Acquisition
Pillpack	Amazon	2018	\$750 million	Acquisition
GreatCall	Best Buy	2018	\$800 million	Acquisition
CareLinx	Generali Global Assistance	2017	Undisclosed	Acquisition
Care.com	Matrix Partners	2014	\$105 million	IPO
Living Independently Group	GE Healthcare	2009	Undisclosed	Acquisition
SilverSneakers	Tivity Health	2006	\$450 million	Acquisition

We see an opportunity to educate investors about the need for caregiving innovations, the marketplace opportunities, and how best to support entrepreneurs committed to developing solutions for the 48 million unpaid caregivers and their recipients. Education of investors and the business community could occur through special roundtables, like the one we hosted in March 2021 for CEOs of caregiving companies, as well as through a new type of caregiving innovations marketplace for entrepreneurs and investors. This type of innovator marketplace would consolidate market data on start-ups seeking funding, metrics and outcome data on successful solutions, and identification of new needs and changing innovation gaps.

Stakeholder Perspectives

The stakeholders include a diverse set of players, including providers and coordinators of care, both paid and unpaid; the recipients of that care; family members who are influencers, decision-makers, or purchasers of products and services; healthcare providers; and payors, including health insurers, employers, Medicare, Medicaid, and Medicare Advantage plans. All of these groups must be involved in the development of a comprehensive infrastructure for caregivers.

Health equity will be a key component of the planning at every level. Additional insights about caregiver needs and experiences, perspectives from partner services and business models, and data and metrics desired are summarized below, based on interviews:

Caregiver Needs and Experience

- Care connection system must be user-friendly
- Many will want help from a human care navigator at some point
- May lack adequate health literacy to find solutions unassisted
- Support for those who are not digitally literate or fluent in English
- Not all can afford the products and services needed
- Privacy and HIPAA compliance is essential for data collection

The system must be inclusive, comprehensive, human touch, trusted, personalized, dynamic, and interactive.

Partner Services Perspective and Business Models

- Caregivers may be unaware of their own job benefits
- Need a broader awareness campaign e.g., "Plan for Care"
- If an ad-tech model is used, it will require volume and scale
- Rely on lead generation fees from participating providers
- Collect data on employers, health plans, or other payors as an alternative lead generator
- The most expensive feature is human care navigation
- Developing awareness to use resources is also costly
- Integrate state and national funding mechanisms

Win-win business models are needed. Support providers with lead generation, insights, data, and broader industry campaigns.

Data and Metrics Desired

- What are the nonfinancial metrics of success to be collected?
- What types of data on quality and satisfaction with a solutions provider should be collected?
- How to create a "Yelp" for caregiving products and services?
- How to assess utilization rates of a care hub via the digital "back door" - i.e., being linked from a prior search?
- How to assess personalized care needs and demand for human care navigators and coaches?
- How to create a feedback loop to modify care products?
- How to assess satisfaction from partner organizations and companies?

Policy Innovations and Initiatives

Legislative initiatives early in the Biden administration have stalled, but action at the federal level remains a key lever for creating a workable caregiving infrastructure in the United States. The importance of these policy initiatives cannot be overstated. Having national leadership recognize the failures in our caregiving system, which affect nearly every family in America, is significant – and providing some financial compensation for the time and work involved in tending to loved ones would be the start of truly valuing the family caregiver. Similarly, the training and provision of a paid workforce of caregivers remains a vital policy imperative. Melinda French Gates has eloquently advocated for a "caregiving czar" and the importance of paid family leave.

The caregiving innovation community recommends that any future legislation include these key features:

- \$400 billion over a decade to address the fragmented care system for older adults
- A holistic approach to the care economy, including both paid and unpaid caregivers
- Paid family leave for 12 weeks; the current Family and Medical Leave Act mandates only unpaid leave
- Social Security credits for the time people spend out of the workforce caring for loved ones
- A \$5,000 tax credit to reimburse families for expenses associated with unpaid caregiving for older adults, including:
 - Household expenses
 - Paid help
 - Home modifications
 - Remote devices to monitor safety
 - Equipment purchases (e.g., hearing aids)
- Medicaid coverage for care at home, not just in nursing homes as is the current practice, and federal contributions to allow states to develop more community alternatives

The Credit for Caring Act of 2021, which would provide up to \$5,000 in federal tax credits for eligible working-family caregivers, along with other policy initiatives, could alter the landscape for caregiving innovations and translate into economic incentives for entrepreneurs. The role of business here is significant, to support both paid family leave and these policy innovations.

The question of who pays for senior and long-term healthcare is essential. Since Medicare does not cover most long-term care costs, most middle-income older adults will not be able to afford all of their fees when they need assistance. In 2019, landmark legislation in Washington state created a fund to provide financial assistance for long-term care. The first program of its kind in the nation, the WA Cares Fund is paid for by a new 0.58% tax on employee wages beginning in July 2023. This will help to offset the needed savings to prepare for longer lives. Employees with long-term care insurance are exempt. The trust program will provide long-term care for a lifetime maximum of \$36,500 per person, and qualified family members acting as caregivers are eligible to receive payments as well for their services.

Several states have embarked on initiatives to comprehensively evaluate the needs of their aging populations. California recently released its Master Plan for Aging. The plan sets out five ambitious goals to be achieved by 2030:

- Housing for All Ages and Stages: We will live where we choose as we age in communities that are age-, disability-, and dementiafriendly, and climate- and disaster-ready. Target: Millions of new housing options to age well.
- 2. Health Reimagined: We will have access to the services we need to live at home in our communities and to optimize our health and quality of life. Target: Close the equity gap and increase life expectancy for all.
- **3. Inclusion and Equity, Not Isolation:** We will have lifelong opportunities for work, volunteering, engagement, and leadership and will be protected from isolation, discrimination, abuse, neglect, and exploitation. Target: Keep increasing life satisfaction as we age.

- **4. Caregiving That Works:** We will be prepared for and supported through the rewards and challenges of caring for aging loved ones. Target: One million high-quality caregiving jobs.
- **5. Affording Aging:** We will have economic security for as long as we live. Target: Close the equity gap and increase elder economic sufficiency for all.

"California has the nation's largest aging population, the largest population of those living with Alzheimer's and other dementias, and the largest population of those caregiving for these growing and disproportionately diverse communities." —Maria Shriver.

Several foundations and advisory firms are spearheading policy innovation for caregivers. The SCAN Foundation, the John A. Hartford Foundation, the Rosalynn Carter Institute for Caregivers, Family Caregiver Alliance, the Commonwealth Fund, Nexus Insights, and AARP are all important advocates in the policy arena. The Milken Institute Center for the Future of Aging is another important influencer in policy and developing needed solutions for caregiving, such as its Alliance to Improve Dementia Care.

Grantmakers in Aging has also played a key role in spearheading collaboration among foundations and philanthropists. It has convened the Family Caregiving Funders Community, with over 64 participants representing 40 foundations with a shared commitment to supporting caregivers. Among these are Archstone Foundation and the Ralph C. Wilson, Jr. Foundation, which are leading initiatives to advance innovative programs and policies.

Anne Tumlinson, founder of Daughterhood and leader of the ATI Advisory, advocates for solutions to pay for care and identifies policies that will be critically important to each family. ATI has worked to outline how nonmedical supplemental benefits can be advanced through Medicare Advantage.

In September 2022, several key reports were released that all highlight the need for policies and funding to support an infrastructure for caregivers in the U.S. The Administration of Community Living issued the "2022 National Strategy to Support Family Caregivers." The SCAN Foundation, the John A. Hartford Foundation, and the Convergence Center for Policy Resolution jointly released "Reimagining Care for Older Adults." Nexus Insights released "Where Am I, Where Do I Go: The Missing Entry Point to Long-Term Care Solutions for Older Adults and Their Caregivers."

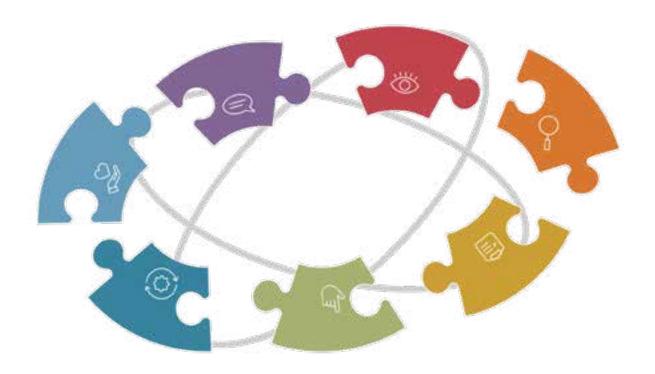
There are many more such policy proposals that can help address the challenges facing our healthcare and care systems in this country. Importantly, the Rosalynn Carter Institute for Caregivers has called for the establishment of an Office of Caregiver Health within the Department of Health and Human Services. This would help to ensure that the voices of family caregivers continue to be heard in future policies and legislation, and in the implementation of initiatives.

Education and Collaboration

We also identified a series of educational priorities that would accelerate innovations. These include educating innovators about the challenges in the marketplace, educating investors about the opportunities and different payors, and educating the public about the value of tending to the unmet needs of family caregivers. These opportunity areas are further detailed in the <u>Appendix</u> as well.

A centralized platform could also serve as a point of connection for the different initiatives focused on policy solutions, and to crowdsource ideas for simple and efficient ways to improve the lives of caregivers and care recipients.

An infusion of public funding will alter the landscape of caregiving innovations. However, until that occurs, we will continue to rely on public-private partnerships to support caregiver needs and to help create more infrastructure.



BRINGING THE PIECES OF THE PUZZLE TOGETHER

As we have seen throughout our survey of caregiving innovations, the caregiving and elder care ecosystems in the U.S. are fragmented and haphazard. The country's complex healthcare system exacerbates the difficulties that families face in locating and being able to afford such care when they need it. The 48 million Americans who will find themselves in an unpaid caregiving role in any given year have no one-stop shop to turn to for information and for the multitude of products and services they seek. Instead, family caregivers often rely on word of mouth or try to glean guidance from hospital discharge instructions or recommendations from social workers. Meanwhile, a recipient's care needs are constantly evolving, as dependence often increases over time.

A relatively new service industry of patient advocates, geriatric care managers, care navigators, care coaches, and concierge services is emerging to help families find solutions to their needs. However, it is not yet at sufficient scale to meet the surging demand for affordable, reliable, and right-sized elder care in the United States.

On the supply side of the equation, companies that provide solutions often struggle to identify who their actual customer is – the caregiver, a family influencer or decision-maker, the care recipient, the insurer, the Medicare Advantage plan, or an employer's human resource officer charged with selecting elder-care benefit plans for employees?

This creates confusion on the demand and supply sides alike, hindering the establishment of a two-sided marketplace that could quickly and efficiently match solution providers with those needing their services. We see an opportunity to remedy this mismatch and solve for caregiving and healthy aging, by developing a caregiving infrastructure freely accessible to all consumers.

We propose that this infrastructure take the form of a Care Connector, a one-stop platform consolidating resources and connecting consumers, solution providers, and innovators through a targeted and efficient matching mechanism. Consumers would be able to access the Care Connector for personalized, curated, and timely information, insights into relevant products and services, and assistance in navigating the complexities of care and reimbursement. Similarly, innovators and solution providers could use the Care Connector for their needs: to reach individuals and families who would benefit from their services, to connect with clinical and strategic collaborators who can provide validation and impact metrics, and to gain greater access to funding.

A Blueprint for a Care Connector

Developing caregiving solutions for older adults at scale is a dynamic and growing field. We believe the complex challenges we've identified can best be addressed by soliciting, iterating, and optimizing ideas from all who have an interest in this critically underserved market.

Our goal is to develop a blueprint for open innovation, with the hope that others will contribute and revise it on behalf of caregivers, care recipients, and families everywhere. We want all stakeholders to review and contribute to these concepts, to help create a viable, effective, ethical, trustworthy Care Connector for caregivers to get the information and solutions they need, and to spur further innovations and policy initiatives to support them.

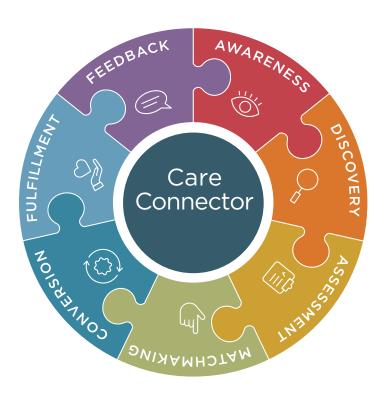
Questions and topics that need to be addressed in the blueprint include:

- **Personal Information:** Identifying the types of information about a care recipient that would be needed and how to protect confidentiality and conform with HIPAA requirements.
- Integration of Existing Resources: Identification of the myriad "care hubs" and information sources currently available, and how to bring them into a central marketplace and platform.
- Curation Capabilities: Information resources that can be accurately matched to the needs of older adults
- **Criteria for Eligibility:** Capabilities and willingness of a company, organization, or resource to be listed as a solution partner in this marketplace.
- Establishing an Advisory Group: Ultimately, this will enable the Care Connector to serve as a trusted brand for all stakeholders.
- Sustainable Business Models: Who will fund the marketplace? We envision a combination of lead generation fees for successful matches, philanthropy, state funding, Medicare Advantage plans, employers, and health insurance providers.

To refine the blueprint, we encourage the formation of public-private partnerships with a few states or regions to implement a Care Connector prototype and obtain feedback on issues encountered, utilization, and integration of existing local resources. Among the states that could be considered are those who have already established some care connection resources: e.g., California, Georgia, Massachusetts, Michigan, New York, Ohio, and Wisconsin.

The Components of a Care Connector

Seven components were identified as essential to any model for a national care hub in our blueprint.





Awareness: A national information campaign, along with local outreach, will be needed to inform people that they *are* "caregivers," and that there is a new resource to assist them. These campaigns will assist in identifying potential consumers, introducing them to the platform, and populating the "funnel" – i.e., discovering and accessing the Care Connector platform.

The components of a communication strategy are essential in helping caregivers identify and respond to the message – that there is a place where they can receive support and get timely and trusted information. The Appendix outlines the many variables to be considered in effective communication strategies. A public service announcement that raises awareness of "Plan for Care" would be among the types of messaging.

Building on the "Portraits of Care" media campaign sponsored by Caring Across Generations, with local and national partners, including the Ad Council, will help to inform the media campaign. Pivotal Ventures launched a Move Care Forward initiative as a call to action in support of America's unpaid caregivers. Through social and digital

media, Move Care Forward tells the stories of real caregivers, creating a sense of belonging and solidarity in what can feel like an isolating experience. Lessons from that initiative could also help shape the awareness campaign. Many states have also developed awareness campaigns, and they will be important members of the platform.

Additional strategies for awareness include referral programs and education services to help discharge planners at hospitals, primary care physicians, and elder-law attorneys.



Discovery: The digital platform where a caregiver goes for information. For those who are not digitally literate, there would be a "CARE411" number to contact, and a care coach could serve as an intermediary to the platform. Caregivers could visit this resource directly – through the "digital front door" – having been directed there by an awareness campaign, or via search to other information resources that would then connect them via the "digital back door." Care coaches need to provide information in multiple languages and in ways that are sensitive to issues of diversity, equity, and inclusion.



Assessment: Three types of assessment are recommended: one focused on the needs of the care recipient, one on the needs of the caregiver, and a financial assessment to identify any insurance or employer benefits available to the caregiver and recipient and determine what types of services are covered.

We envision that the Care Connector could utilize existing care navigation tools such as CareNav, created by the Family Caregiver Alliance. This offers the ability to curate information and resources for caregivers and care recipients.

Digital navigation will be the dominant mode, but an important component of assessment will include human navigators for those who need help in using the Care Connector and for support. We have learned how important it is to have human contact in the process from peers who understand the many needs and demands on caregivers. Human navigation and peer support will be among the most costly components of this type of Care Connector.

One question we'll pose to the Advisory Group is whether there are ways to integrate some of the tools that partner organizations and companies utilize.



Matchmaking: Assessments result in curated information for the caregiver and recipient, as well suggested solutions for their needs. Results are then tendered to solution providers and partners, who respond with offers.



Conversion: Caregiver understands the options, chooses from among the solutions generated, and engages with partner services. For-profit solution providers may offer free service for every generated lead to their company.



Fulfillment: Solution providers and partners deliver services to the care recipient or caregiver. A key feature will be creating effective payment mechanisms.



Feedback: Both solution partners and recipients would provide feedback to the Care Connector about quality, satisfaction, and any challenges, as a mechanism to improve service and accountability. It is important to note when a match does not work out or doesn't meet established quality-control standards.

The types of information and solutions sought will evolve over time as the needs of the caregiver and care recipient change. These reassessments will result in multiple matchmaking and fulfillment cycles. One advantage of being in the Care Connect system is that there will be documentation to facilitate a review of new needs.

Incorporating Existing Care Hubs

One goal of the Care Connector will be to integrate the many excellent resources that already exist for information, as well as existing care assessment and care navigation tools, and provide access to solutions.

However, there are currently an overwhelming number of choices. Several associations for specific diseases, such as the American Heart Association, the Alzheimer's Association, and the Parkinson's Association, provide helpful information, as do hospitals and medical research centers. There are even some platforms for specific disease needs; Solaria, for example, lists most products and services for people living with diabetes.

The Choices Can Be Overwhelming



Private Sector and Nonprofits

Several nonprofit organizations and for-profit companies already offer versions of a care hub or connector services. We envision elevating the profile of these existing resources and solutions within the Care Connector, as well as incorporating some of the assessment tools they have developed. Examples include:

- Care assessments and caregiver resource centers: <u>Family</u> Caregiver Alliance, <u>CareNay</u>, <u>Eldercare Locator</u>, <u>US Aging</u>.
- Assisted-living communities and housing alternatives: <u>A Place</u>
 for Mom, <u>Care Academy</u>, <u>Eldercare Locator</u>, <u>The Nursing Home</u>
 Resource Center, Seniorly.
- Care navigation services for employers and consumers: <u>Avanlee</u>, <u>Caregiving.com</u>, <u>Carely</u>, <u>Cariloop</u>, <u>Findhelp.org</u>, <u>Helper Bees</u>, <u>Homethrive</u>, <u>Ianacare</u>, <u>Kinumi</u>, <u>Vital Links</u>, <u>Wellthy</u>.
- End-of-life care and planning: <u>Cake</u>, <u>FreeWill</u>, <u>Iris Plans</u>.

Federal and Statewide Initiatives

The Care Connector would also integrate government-sponsored efforts and platforms specific to individual states:

- Family Caregiver Alliance has created the CareNav tool for family caregivers to search for services by state. CareNav is a HIPAA-compliant, client-facing, interactive social care record that helps unpaid family caregivers assess patient care needs regarding functioning (ADLs and IADLs), medical tasks, and chronic health conditions, as well as caregiver measures of stress, depression, loneliness, and ability to pay. CareNav helps caregivers locate public, nonprofit, and private programs in each state.
- Area Agencies on Aging: Congress passed the Older Americans Act (OAA) in 1965 establishing the <u>Administration on Aging</u> to administer the newly created grant programs and to serve as the federal focal point on matters concerning older adults. The OAA also led to the development of the <u>Eldercare Locator</u> and <u>US Aging</u>. Today the OAA authorizes a wide array of service programs through a national network of state and local agencies. Each state receives funds based on population.
- No Wrong Door is a joint initiative of the Administration of Community Living, the Centers for Medicare and Medicaid Services, and the Veterans Health Administration. NWD Systems have improved access to long-term services and support options, and they would be ideal partners for the Care Connector.
- New York State and National Academy of Medicine launched an excellent information platform with an interactive map. Created to inform older adults in New York City of where they can find resources near their home, this map is a prototype for other cities and states of what could be helpful. In smaller countries, these types of platforms are available nationwide. New York state has an app for caregiver resources through a "311" hotline.

- Additional statewide initiatives are spotlighted in the <u>Appendix</u> and include:
 - California Master Plan for Aging: Five Bold Goals
 - Georgia Division of Aging Services
 - Massachusetts Caregiver Coalition
 - Massachusetts Healthy Aging Collaborative
 - New York Master Plan for Aging
 - Wisconsin Caregiver Council

Gaps Identified: Exploration Groups and Interviews

We also conducted a series of exploration groups and interviews with additional stakeholders in 2022, including many of the CEOs who participated in the 2021 Executive Roundtable, potential funders for a Care Connector platform and marketplace, philanthropists, and government agencies. We asked the stakeholders to assess the strengths and weaknesses of resources currently available.

Gaps Identified:

- Lack of easy access to existing resources
- Lack of advertising budgets for state and local agencies
- Financial assessment tools needed
- Matching of needs to solutions is missing
- No direct business-to-consumer channels
- Barriers to scaling solutions
- No current infrastructure
- Financial incentives to help caregivers
- Culturally and linguistically appropriate resources for diverse caregivers

Insufficient Awareness: We interviewed several existing care hubs that do provide free access to information through Caregiver Resource Centers or the Area Agencies on Aging, and all describe insufficient marketing budgets to reach their target audiences. As an example, the Family Caregiver Alliance (FCA) in California targets an

audience of over 4 million unpaid caregivers, yet it has only been able to reach on average 10,000 per year. A Care Connector could help address this gap by partnering with organizations like the FCA in a series of awareness campaigns.

Curated Resources: The advent of machine learning and AI should facilitate the creation of a searchable, curated directory of resources, in multiple languages, that can be continually updated. In caregiving, many of the solutions are hyperlocal, so obtaining the most up-to-date information is both essential and challenging.

Caregiver Needs: The Care Connector needs to be inclusive and personalized, have a human touch, and be accessible for those who are not digitally literate. The most expensive component will be providing access to personal assistance.

Data and Metrics: What characteristics of caregivers vs. care recipients should be collected? How to assess personalized care needs – frequency of use of human care navigators? How do we create a feedback loop to modify the care hub products? How do we assess the partner organizations' and companies' satisfaction with participating in the Connector? Venture firm Andreessen Horowitz outlines five categories of marketplace metrics in the "passion economy." These guidelines will need to be included in the metrics assessments that the Care Connector will incorporate. See the Appendix for an explanation of these metrics:

- Success metrics
- Revenue metrics
- Engagement metrics
- Growth metrics
- Community-related metrics

Clinical Partners: Another pain point identified by companies is the need to find clinical partners to test their products and services. Innovators and start-ups also need opportunities to evaluate their ideas for impact and market fit. It could be worthwhile to create a database of hospitals, health plans, and community groups willing to participate in such studies.

There are also groups of older adults who are interested in helping to evaluate new products and services that they might benefit from, but few entrepreneurs are aware of them. The Longevity Explorers, Age of Majority, and the MIT AgeLab: Lifestyle Leaders are a few examples. Brookdale Senior Living has an entrepreneur-in-residence program. Community-based organizations, such as Y's and other local networks through the Village Movement, like Avenidas Village, can also serve as focus groups for user feedback and iteration.

A key component of a caregiving innovations marketplace would be the capability to identify market gaps. Creating a way to generate new product and service concepts, and a platform that facilitates collaboration, would accelerate the development of novel solutions. This could involve engaging caregivers themselves in solution-development teams, helping to establish product market fit.

Additional insights about caregiver needs and experiences, perspectives from partner services and business models, and data and metrics desired are summarized in the Appendix as well.

Developing a Business Model

"The ROI is clear. Proactive long-term care support and planning can avoid hospitalizations, falls, and other events that require very expensive reimbursements. Plus, it makes families feel in control, a sense of partnership and community, and gives older adults choice and dignity." —CEO of a potential partner for Care Connector

The business model that resonated most for companies offering assessments and care navigation services is a "generated lead" model - for every paying customer, a service would be provided free to someone who could not afford to pay. For many public benefit corporations, giving back in this way is central to their mission.

Several existing companies offer care navigation services, which are an essential component of the Care Connector concept. For those who do not match with a company but still need support, the Care Circle Leaders from Daughterhood are an excellent alternative. These experienced caregivers offer not only information and guidance, but also empathetic peer support to caregivers.

Anything that encourages an employer or insurer to sign on is attractive to partner companies. Many are enthusiastic about gaining brand recognition in multiple ways. The platform could, for example, encourage people to inquire whether their employer offers access to these services, solving the payor issue. And if not, it might result in a conversation between employer or insurer and the partner company. This approach would generate data that could be used by partner companies to approach health plans. E.g., "Dear Health Plan, forty-three of your enrollees have inquired about caregiver support services through Care Connector in the past six months. We would like to introduce our company to you."

Creating a Coalition of Trusted Partners

The Care Connector will require a respected Advisory Group to serve a number of key roles, such as establishing guidelines, criteria and standards for participation, quality assurance protocols, and metrics. This Advisory Group will be vital in establishing the Care Connector as a trusted brand, and it should include a broad range of stakeholders, such as:

National Nonprofits: E.g., <u>AARP</u>, <u>US Aging/Eldercare Locator</u>, <u>Family Caregiver Alliance</u>, <u>Rosalynn Carter Institute for Caregivers</u>, <u>Caring Across Generations</u>

Solution Providers: E.g., <u>Care.com</u>, <u>Caregiving.com</u>, <u>Cariloop</u>, <u>Findhelp.org</u>, <u>Givers</u>, <u>Helper Bees</u>, <u>Home Thrive</u>, <u>Ianacare</u>, <u>Wellthy</u>

Foundations and Philanthropies: E.g., Grantmakers in Aging, SCAN Foundation, John A. Hartford Foundation

State and Federal Agencies: E.g., Offices of Elder Affairs, State Healthy Aging Coalitions, National Institute on Aging/NIH, Centers for Medicare & Medicaid Services

Investors: Venture capital firms, angel funds, private family offices

Insurance Companies: E.g., Aetna, Blue Cross Blue Shield, Cigna, Anthem

Medical Societies and Providers: E.g., the American Geriatric Society, the American College of Physicians, the American Academy of Family Physicians

In Fall 2022, we presented the initial framework of a blueprint for the Care Connector at a "Seize the Moment" gathering, sponsored by the Rosalynn Carter Institute for Caregivers. The feedback we received from a broad range of stakeholders spurred further innovation and work on developing the Care Connector hub. All acknowledged the need for a centralized information and data resource, and there was general agreement that a "rising tide lifts all boats," consistent with the ideas of Stuart Butler and Len Nichols in their article "Could Health Plan Co-Opetition Boost Action on Social Determinants?"

The Rosalynn Carter Institute is a leader in recognizing that caregiving is a public health issue, and it has a unique ability to convene thought leaders from the many sectors essential to the sort of public-private partnership we propose.

Below are some reflections on the discussion during the meeting for the Blueprint Project.

API: Several companies expressed an interest in helping sponsor an API (application programming interface) that would let different applications "talk to each other" on a Care Connector platform. This would create a seamless flow of data into the Care Connector, ensuring that information is accurately represented and allowing transactions to be tracked by the Care Connector and its partners. It might also speed the development of the platform, if enough companies and organizations join the effort, as services could be piped into the Care Connector automatically, as opposed to being manually added and updated. Open APIs could become available on both a statewide and a national basis.

As an example of this type of coordination, <u>Caregiving.com</u> has offered to share community data it has curated nationwide, including support groups and events that support family caregivers. The Area Agencies on Aging would also share state-level data on resources like home health providers and payment programs for family caregivers.

Transparent Criteria: The determination of who would be eligible to join the platform, and the process of monitoring partners and the quality of services delivered, must be transparent to all players. Here again, the importance of an Advisory Group in setting and upholding standards was reinforced. Ensuring quality and reliability is paramount.

Voice of the Consumer: Participants stressed that there must be a way of incorporating consumer perspectives into the Advisory Group, at the highest level.

Ensuring Universal Access

To evaluate the robustness and social equity of a Care Connector blueprint, it is vital to account for the diversity of the 48 million unpaid family caregivers in the U.S. We are deeply committed to building a platform that supports all caregivers, regardless of background or family circumstances. For instance, Latinos and African Americans have higher rates of dementia and physical illnesses such as diabetes and hypertension, and a higher portion of caregivers in these groups are unemployed or work in low-wage service jobs. This often results in limited access through employer-based insurance plans.

We used several different profiles, based on information from AARP and the National Alliance for Caregiving, to assess how the different components of a Care Connector could support their needs. The Appendix contains a sample of nine different personas representing the diversity of caregiver needs and a range of stages and demographics. We anticipate that the forthcoming profiles being created by the Rosalynn Carter Institute for Caregivers and Duke University could also be used to test the impact of different features and components as the blueprint evolves.

Below are examples of common situations that caregivers and care recipients face in their search for solutions that meet their needs:

Debbie (43), Houston, TX

Nearby caregiver

" Whatever will happen next?"



Career	Office manager	
Care recipient	Mother - Elizabeth (72)	
Diseases	Signs of early Alzheimer's	
Living situation	Lives 15 minutes drive away	
Support	No professional help	
Context	Married with two school age children, boy and girl. Works out and eats healthy when she can. Boss unaware of her caregiving responsibilities.	
Core Challenges	Managing needs of children and mother. Understanding what to expect in the future Financial concerns. Being productive at	

work. Self care

How they would engage with a new solution:

Goals & expectations

- · Wants to have a clearer understanding of Alphemer's, what to expect, and how best to support mother
- Wants to consult to mother's PCP and specialized physician
- Have regular updates of all care recipients to make sure they're alright. without having to travel/stretch herself. Wishes caregiving was more affordable and less stressful.
- Wants someone to accompany mother to doc when unable to herself

How they would find out about it:

Google, word of mouth, Facebook

What resources would they use most:

- Alabeimen's safety checklist, disease progression plan-
- Comm hub w/ stakeholders for children's and mother's care
- Tech / app to integrate to daily life
- Caregiving expenses relimbursement service
- Transportation accompaniment service







alzheimer's association'







PERSONA DESCRIPTIONS (USDATA)

Peter (45), Milwaukee, WI Distant caregiver

" I just hope Dad will be OK"



Career	Works in city administration, full time
Care recipient	Father, Ron (80) - Chicago, IL
Diseases	Parkinson's
Living situation	Lives a two hour drive away
Support	Home Instead care, 15 hours per week
Context	Only child. Mother passed away last year. His lather lives alone in the house he grew up in
Core challenges	Understanding what's happening from a distance. Paying for care now and planning for the future. Guilt and shame for not being more present. Navigating the care landscape. Communicating with doctors.

How they would engage with a new solution:

Goals & expectations

- B. Wishes to have a way to be more involved in care, maintain connection w/ dad without having to travel
- Wants to have someone that they can ask questions
- Wishes for a clearer understanding of father's disease progression.
- and how to prepare for it Wishes for more affordable care

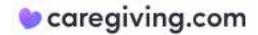
What resources would they use most:

Google, word of mouth, facebook, Home Instead partnership.

What resources would they use most:

- B Remote control of administrative tasks related to caregiving finance, legal, appointment scheduling
- Care navigation support/consultant
- 3 Daily video check in w/ dad and remote monitoring
- Tech/ app to integrate to daily life
 Gare cost reinstursement service









PERSONA DESCRIPTIONS (US DATA)

Mary (67), Louisville, KY

Co-residing caregiver

"There's so much to manage"



Career	Retired school teacher
Care recipient	Husband - Bill (74)
Diseases	Bile duct cancer
Living situation	Living together
Support	Two sons, remote
Context	Spends a lot of time in doctors appointments and managing medications and chemo. Keeps track of medicines.
Core challenges	Financial worries, having recently retired. Wants to learn more about cancer but unsure. Confused by tech and has trouble getting online. Struggles to keep track of pills, scripts, appointments. Struggles to make time for herself. Learning about govt services and supports.

How they would engage with a new solution:

Coals & expectations

- Wishes to have someone on-site or remote helping with pills.
- scripts, appointments, and other caregiving activities

 Wishes caregiving was more affordable and less time-
- · Wants to learn about cancer and what to expect
- Wants help regularly accompanying husband to hospital

How they would find out about it

· Physician, word of mouth, sons seeing into on Facebook

What resources would they use most:

- Caregiving expenses reimbursement service.
- Connection service to in person daytime caregiver
- Remote control of administrative tasks related to caregiving.
- finance, legal, appointment scheduling
 Hospital accompaniment service (govt)









The <u>Appendix</u> also contains examples of innovator profiles and nonprofit organizations that would be invited to participate in the Care Connector and be part of the marketplace of solution providers.

Conclusion

The Stanford dciX Caregiving Innovations Project set out to find ways of accelerating innovations for caregivers of older adults, identify roadblocks, and develop a caregiving solutions blueprint for others to use and build upon. Our goal is to catalyze fresh thinking and ignite a passionate, mission-driven community of innovators to help transform the concepts outlined in this report into actual resources, services, and businesses, with significant market impact.

We offer our findings as an open-source reference and innovation tool for all interested parties to use in developing a functioning Care Connector. With innovation, investment, and information, we can create the infrastructure that families need and deserve.

Acknowledgements

We see a great deal of momentum in the U.S. to help millions of families provide care with dignity and respect to those they love. All of us involved in the dciX Caregiving Innovations Project thank Pivotal Ventures, a Melinda French Gates company, for their support of this work and their commitment to caregivers.

Background Sources

AARP Research. Caregiving Innovation Frontiers (June 2017).

 $https://www.aarp.org/content/dam/aarp/research/surveys_statistics/ltc/2019/caregiving-innovation-frontiers-2017.doi.10.26419-2Fres.00299.001.pdf$

Administration of Community Living. 2022 National Strategy to Support Family Caregivers (September 2022).

 $https://acl.gov/sites/default/files/RAISE_SGRG/NatlStrategyToSupportFamilyCaregivers.pdf and the supportFamilyCaregivers.pdf and the sup$

Age of Majority. Connecting with Caregivers, Executive Report (November 2022) https://www.ageofmajority.com

Aging 2.0.

https://www.aging2.com

ATI Advisory (May 7, 2020).

https://atiadvisory.com

Boston Consulting Group. "Solving the \$290 Billion Care Crisis" (November 15, 2022).

https://www.bcg.com/publications/2022/solving-the-care-crisis

Butler, Stuart and Nichols, Len. "Could Health Plan Co-Opetition Boost Action on Social Determinants?" *American Journal of Public Health* (September 2022). https://ajph.aphapublications.org/doi/10.2105/AJPH.2022.306941

Care.com. "The Future of Benefits Report 2022," Care@Work Blog for HR Professionals.

https://www.care.com/business/resources/ebooks-and-reports/future-of-benefits-report-2022

Convergence Center for Policy Resolution. *Reimagining Care for Older Adults* (September 2022).

https://convergencepolicy.org/our-work/health-and-wellbeing/reimagining-care-for-older-adults

Credit for Caring Act of 2021.

https://www.congress.gov/bill/117th-congress/senate-bill/1670/text

Dewhurst, Martin et al., McKinsey Health Institute. "Living Longer in Better Health: Six Shifts Needed for Healthy Aging" (November 11, 2022).

https://www.mckinsey.com/mhi/our-insights/living-longer-in-better-health-six-shifts-needed-for-healthy-aging and the six-shifts-needed and the six

Etkin, Keren. "2021 Age Tech Market Map." TheGerontechnologist.

https://thegerontechnologist.com/2021-age-tech-market-map

Family Caregiver Alliance. CareNav.

https://www.caregiver.org/connecting-caregivers/fca-carenav

Family Caregiver Alliance. Family Caregiver Services by State.

https://www.caregiver.org/connecting-caregivers/services-by-state

Fuller, Joseph and Raman, Manjari, Managing the Future of Work. "The Caring Company." Harvard Business School (2021).

 $https:/\!/www.hbs.edu/managing-the-future-of-work/Documents/The_Caring_Company.pdf$

Gates, Melinda. "This Pandemic Has Exposed Our Nation's Broken Caregiving System," *The Washington Post* (December 2, 2020).

 $https://www.washingtonpost.com/opinions/melinda-gates-broken-caregiving-system/2020/12/02/7c0dd9ae-34d1-11eb-8d38-6aea1adb3839_story.html$

Glasner, Joanna. "Funding Surges for Startups Serving Older Adults," Crunchbase News (June 4, 2021).

https://news.crunchbase.com/startups/eldercare-senior-home-care-startups-funding

Golden, Susan. Stage (Not Age): How to Understand and Serve People Over 60 the Fastest Growing, Most Dynamic Market in the World. Harvard Business Review Press (2022).

Health Leads. National Caregiver Summit 2021.

https://healthleadsusa.org/communications-center/past-events/national-caregiver-summit-2021

Holding Co. "Investors' Guide to the Care Economy." Pivotal Ventures.

Krueger, Liz. Senior Resource Guide, 2021-2022 Edition. New York State Senate. https://www.nysenate.gov/sites/default/files/article/attachment/2021-2022_senior_resource_guide.pdf

May Jr., Steven. "Caregiving in the U.S. 2020." National Alliance for Caregiving (May 2020).

www.caregiving.org/caregiving-in-the-us-2020

Milken Institute.

https://milkeninstitute.org

MIT AgeLab. "Mapping the Caregiver Journey" (2017). http://agelab.mit.edu/caregiving

National Alliance for Caregiving. "Caregiving in a Diverse America: Beginning to Understand the Systemic Challenges Facing Family Caregivers" (2021). https://www.caregiving.org/caregiving-in-a-diverse-america-beginning-to-understand-the-systemic-challenges-facing-family-caregivers

Nexus Insights. "Survey: One in Four U.S. Older Adults Needed Long-Term Care for Themselves or a Loved One in 2022."

https://www.nexusinsights.net/long-term-care-survey

Nexus Insights. Where Am I, Where Do I Go: The Missing Entry Point to Long-Term Care Solutions for Older Adults and Their Caregivers (September 2022). https://www.nexusinsights.net/long-term-care-solutions

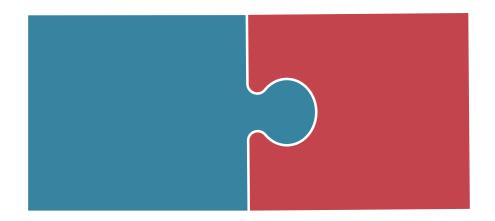
Nursing Home Resource Center. Centers for Medicare & Medicaid Services. https://www.cms.gov/nursing-homes

Rosalynn Carter Institute for Caregivers. *Caregivers in Crisis: Caregiving in the Time of Covid-19* (October 2020).

https://www.rosalynncarter.org/wp-content/uploads/2020/10/Caregivers-in-Crisis-Report-October-2020-10-22-20.pdf

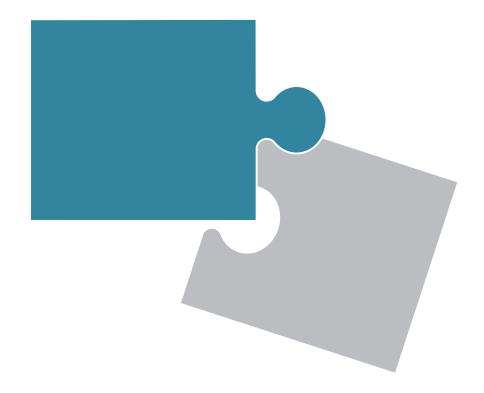
Techstars Future of Longevity Accelerator.

https://www.techstars.com/accelerators/longevity



APPENDICES

LANDSCAPE OF CAREGIVING INNOVATIONS



APPENDIX PART I

LANDSCAPE OF CAREGIVING INNOVATIONS

Appendix

Part I: Caregiver Journey and Innovator Perspectives

Section I: Magnitude of the Challenges

- Key Research Reports
- Demographics

Section II: The Caregiver Journey

- Assessment Tools for ADLs
- Guides for Caregivers

Section III: The Innovator Journey

- Resources for Innovators
- Executive Roundtable: Company Profiles
- Opportunity Areas Identified

Section IV: Mapping the Innovations Landscape

- Caregiving Subdomains
- Innovation Gaps and Opportunities

Part II: The Solutions Landscape

Section V: The Future of Caregiving Solutions

- Investors in Caregiving
- Educational Opportunities

Section VI: Bringing the Pieces of the Puzzle Together

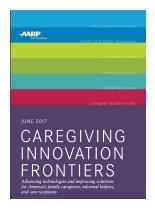
- Communications Strategies
- Profiles of Existing Care Hubs
- State Initiatives
- Metrics for a Care Connector
- Caregiver Profiles
- Health Equity
- How a Care Connector Can
 Support Different Types of Caregivers

Section I: Magnitude of the Challenges

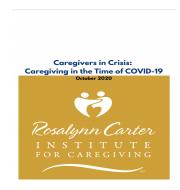
Key Research Reports



National Alliance for Caregiving and AARP: Caregiving in the U.S., 2020



AARP: Caregiving Innovation Frontiers, 2017



Rosalynn Carter Institute for Caregivers: Caregivers in Crisis, October 2020

Demographics

Characteristics of Family Caregivers

- Gender: 61% female, 39% male
- Age: Average age is 50; 54% are 50 or older
- Race/ethnicity: 61% are non-Hispanic white, 17% Latinx/Hispanic, 14% African American, 5% Asian/Pacific Islander, 3% other
- Marital status: 54% married, 21% never married, 8% divorced, 7% living with a partner, 4% widowed
- Employment status: 61% employed, 39% not employed
- Household income: Average is \$67,500; 36% have a net income below \$50,000
- Number of care recipients: 76% care for one adult, 24% care for two or more

Characteristics of Care Recipients

- Gender: 61% female 39% male
- Age: Average age is 69; 46% are 75 and older
- Relation to caregiver: 89% of care recipients are related to their caregivers by blood or marriage; 42% are parents, 12% spouse/partner, 8% parent-in-law, 8% grandparent/grandparent-in-law, 7% sibling/sibling-in-law
- Living situation: 26% of care recipients live alone
- Residence: 43% of care recipients live in their own home, 40% live in their caregiver's household, 11% live in senior housing communities
- Main reason for needing care: 16% "old age," 12% mobility issues, 11% dementia, 6% cancer, 6% post-surgery/wound care, 5% mental/emotional illness, 5% stroke, 4% diabetes, 4% feeble/falling, 3% vision loss

What Do Family Caregivers Do?

Family caregivers provide an average of 23.7 hours of care each week. This number goes up substantially for those whose care recipients live with them (37.4 hours per week), making caregiving equivalent to a full-time job. Family caregivers help seniors with a variety of tasks that are broken down into a few main categories.

Section II: The Caregiver Journey

Assessment Tools for ADLs

Katz Index of Independence in Activities of Daily Living (Katz ADL)

<u>Lawton-Brody Instrumental Activities of Daily Living (IADL)</u>

Klein-Bell Activities of Daily Living Scale (K-B Scale)

Cleveland Scale for Activities of Daily Living (CSADL)

Bristol Scale (BADLS)

Barthel Index for Activities of Daily Living

Guides for Caregivers

A Place for Mom

AARP HomeFit Guide and checklist

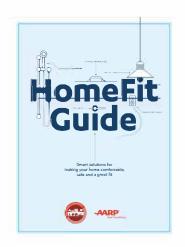
NIH/NIA Resource List

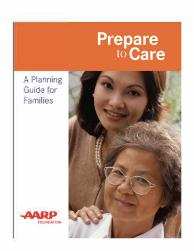
Prepare for Your Care

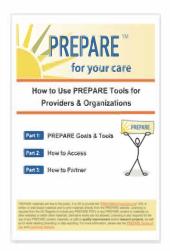
Age-Friendly NYC

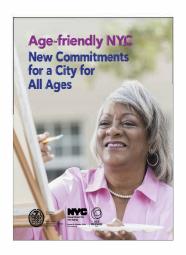
The Future of Remote Care Technology and Older Adults

Senior Resource Guide

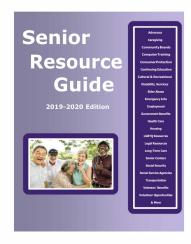








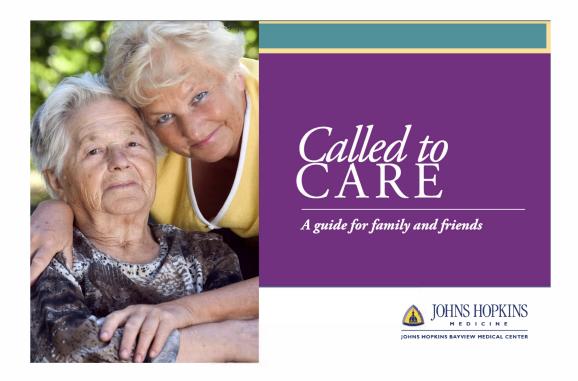












Journey Map

The <u>AgingWell Hub</u> created a 'caregiver journey map' for those caring for people with Alzheimer's and other dementias, and we have used it to illustrate a generic caregiver's journey.

This framework allows us to:

- Identify and prioritize areas where caregivers need support
- Drive alignment and collaboration across various players
- Inform development of solutions for caregivers and recipients



The six stages are below - and are mapped on to each caregiver platform analyzed:



The Collective for Stanford dciX | Family Caregiving Marketplace July 2022

Section III: The InnovatorJourney

Resources for Innovators

Newsletters

- Age in Place Tech
- AgeTech The Gerontechnologist
- Daughterhood
- Leading Age
- Like We Care
- Longevity Explorers
- Milken Institute on the Future of Aging
- MIT AgeLab
- National Institute on Aging
- Next Avenue
- OATS
- Senior Planet
- The AARP Newsletter and Website: Caregiving
- The Ageist
- The Gerontologist: Better Health While Aging, Leslie Kernisan, MD

Books for Innovators

- A Long Bright Future: Happiness, Health, and Financial Security in an Age of Increased Longevity, by Laura L. Carstensen (2009)
- Being Mortal: Medicine and What Matters in the End, by Atul Gwande (2014)
- The Upside of Aging: How Long Life Is Changing the World of Health, Work, Innovation, Policy, and Purpose, by Paul H. Irving (2014)
- The 100-Year Life: Living and Working in an Age of Longevity, by Lynda Gratton and Andrew Scott (2016)
- AgeProof, by Jean Chatzky and Michael E. Roizen (2017)
- The Longevity Economy, by Joseph F. Coughlin (2017)
- Wisdom at Work: The Making of a Modern Elder, by Chip Conley (2018)
- Stage (Not Age): How to Understand and Serve People Over 60—the Fastest Growing, Most Dynamic Market in the World, by Susan Wilner Golden (2022)

Articles for Innovators

- "50 Million Americans Are Unpaid Caregivers. We Need Help." The New York Times (February 22, 2021)
- "CVS and UPS Will Use Drones to Deliver Prescriptions in a Retirement Community Amid Coronavirus Outbreak," CNBC (April 27, 2020)
- "Caregiving Benefits Tend to Miss the Mark," SHRM (January 22, 2019)
- "Be a Friend to the Elderly, Get Paid," The New York Times (April 23, 2020)
- "A16Z-Backed Tomorrow Health Launches With \$7.5M Seed Round to Improve in-Home Healthcare," TechCrunch (April 28, 2020)
- "Melinda Gates: How Rethinking Caregiving Could Play a Crucial Role in Restarting the Economy," The Washington Post (May 7, 2020)
- "The \$740 Billion Senior Care Market Is Ripe for Disruption, but Full of Challenges," Medium (November 30, 2016)
- "Clever Care Receives \$20M Series A Round to Launch New California Medicare Advantage Program," Crunchbase (April 24, 2020)
- "<u>Technology for Aging: 2020 Market Overview</u>," Stanford Medicine (March 2020)
- "How to Prepare Your Financial Information for When You Die," The Wall Street Journal (October 3, 2020)
- "GetSetUp Raises \$10 Million to Help Older People Meet Economic and Learning Opportunities," The Education Magazine
- "Early Clinical and Sociodemographic Experience With Patients Hospitalized With Covid-19 at a Large American Healthcare System," eClinicalMedicine (August 18, 2020)
- "<u>Does Private Equity Investment in Healthcare Benefit Patients? Evidence from Nursing Homes</u>," National Bureau of Economic Research (February 2021)
- "Caring for Your Company's Caregivers," Harvard Business Review (November 13, 2018)
- "Just How Old Are We Getting?" Harvard Business Review (November 15, 2018)
- "Rethinking Retraining," Harvard Business Review (November 9, 2018)
- "Retirement-Proof Your Company," Harvard Business Review (November 14, 2018)
- "The Longevity Opportunity," Harvard Business Review (November 8, 2018)
- "What Happens to Younger Workers When Older Workers Don't Retire," Harvard Business Review (November 16, 2018)
- "When No One Retires," Harvard Business Review (November 7, 2018)

- Caregiving and Well-Being, MIT AgeLab
- "What Robots Can—and Can't—Do for the Old and Lonely," The New Yorker (May 24, 2021)
- "The Caring Company: How Employers Can Cut Costs and Boost Productivity by Helping Employees Manage Caregiving Needs," Harvard Business School (2019)
- Caregiving Question and Answer Tool, AARP

Databases of Caregiving Innovations

- AARP Caregiving Innovation Frontier (303): Data set of companies referenced in the 2017 <u>Caregiving Innovations Frontier</u> report
- Gerontechnologist (154): 2020 Agetech database issued by Keren Etkin
- PitchBook (69): Search focused on Caregiving in 2020 on their database
- <u>Combined</u> (834): A combined view of the above data sets

Nonprofit Organizations Focused on Caregiving Innovations

- The Conversation Project
- The Commonwealth Fund
- Daughterhood
- The Hartford Foundation
- The SCAN Foundation
- Grantmakers in Aging

Resources for Entrepreneurs

There are some excellent resources that entrepreneurs can use to evaluate product and service ideas:

- Longevity Explorers
- Avenidas Village
- The Villages Movement
- Brookdale Senior Living
- MIT AgeLab: Lifestyle Leaders
- Age of Majority

Executive Roundtable: Participating Companies and Others Interviewed

Aloe Care Health (Safe Homes)

Aloe Care is an advanced voice-activated medical alert system and caregiver support platform. Targeting and reinventing the \$12.5 billion Personal Emergency Response System market, it focuses on the new generation of caregivers, enabling care recipients and their families to stay connected using smartphones. Aloe Care's 2020-21 revenue growth was achieved across multiple revenue streams, including white-label offerings, private-duty home care providers, select insurance partners, and direct-to-consumer online sales. CVS, Aetna, and Comcast are among its customers. It recently raised a \$5 million round that includes mission-driven investors such as City Light, Million Lives Fund, Springbank Collective, Drumbeat Ventures, and the Innovations for Impact Fund.

Cake.com (End-of-Life Planning)

Started by Suelin Chin and Mark Zhang to make end-of-life planning easier, they have created a company which offers a complete range of services and products that may be needed to plan for all end-of-life (EOL) needs, and to address the fragmented EOL market. It has emerged as a platform to navigate the broad range of needs from advance care planning to how to prepare for funeral arrangements, and to be a repository for all these decisions and documents. Cake partners with a myriad of companies and organizations that provide services and products in the EOL market, and it receives a referral and revenue-sharing fee. While a number of companies are addressing one or more EOL care needs, there are relatively few who have developed a comprehensive platform like Cake, which makes access to information, legal forms, and transparency in pricing so accessible. The platform is free to anyone who uses it. Cake has scaled by using a successful direct-to-consumer approach, though it also sells to financial institutions and health plans incorporating a B2B strategy, and it receives referral fees from its partner organizations.

Care.com (Care Support)

Care.com was launched in 2007 and provides a range of care support services, including nannies, cleaners, and elder care. It works with employers to provide custom care solutions for their employees, including on-demand and backup care, expert assistance to find a caregiver, and masters-level social workers who help employees tackle the emotional, administrative, and logistical challenges of family care needs. Its customers also include families and home care providers. It is one of the largest online two-sided marketplaces for care, connecting families looking for care and providers looking for work. Senior care is its fastest growing vertical, reaching 25,000 new families a month, while its enterprise business services over 15 million employees. It went public in 2014 and was acquired in 2020 by IAC.

Carely (Care Navigation and Information Platform)

Carely Inc. owns and operates three platforms: Caregiving.com, Carely Family App, and Carely Community. Its customers include Medicare Advantage plans, long-term care providers, and healthcare brands. It recently acquired Caregiving.com, which is a platform for caregivers of both older adults and children, and the former is the fastest growing part of its business.

Daughterhood (Care Information and Navigation, Advocacy)

Founded by Anne Tumlinson in 2016, Daughterhood's mission is to support and build confidence in women who are caring for aging parents. The website connects women to content, resources, and a community that will inform and inspire them in their work as caregivers to parents and spouses. It has built a growing virtual community through Circles of Care led by members in different cities and states. Tumlinson also founded ATI, an important advisory and advocacy organization for care of older adults. She has pointedly assessed the current state of caregiving innovations, likening them to a lot of Christmas ornaments without a Christmas tree to support them.

Devoted Health (Healthcare Navigation and Insuretech)

Started in 2017, Devoted sells a range of Medicare Advantage plans and provides a concierge-style service to help people navigate the complexities of the healthcare system. It offers personalized medical plans that feature guides to work closely with physicians to avoid unneeded medical procedures, and it promotes access to care through tech-enabled platforms. Importantly, Devoted has raised over \$1.8 billion since its founding. It identified an important pain point for older adults who want to enroll in Medicare Advantage but face too many choices, with too little information.

Grandpad (Digital Accessibility, Isolation, Care Management)

Founded in 2014, Grandpad uses a tablet device, simplified for the older adult user, to let them communicate more effectively with family members and the community. The tablet is preprogrammed to simplify transactions inside and outside of the family. The company is acquiring customers in both B2B and B2C markets. The B2C is done via Target stores, where the device comes with a phone plan and a monthly fee. B2B is done via several partners: Home Instead, PACE, and WellMed. Primary revenue is from the subscription service, and it has about 500,000 users at present. A big obstacle is that the user has to be in that sweet spot where they can use a fully functional but simplified smart device with sufficient visual and manual skills, but can't use a normal smart device. Initial cost and subscription costs may be barriers to growth. Grandpad hopes to couple its device with telehealth platforms, which could be an area for significant growth.

Homethrive (Care Navigation)

Homethrive empowers older adults with navigation and other services, enabling them to remain independent, while providing support to their families. The company raised \$20 million in Series B funding in 2022. Homethrive develops personalized care plans and provides 24/7 digital and human concierge services by Care Guides and expert coaching from Homethrive-trained social workers. It provides infrastructure to those who are aging in their own homes, selling B2B to the insured employer market.

Honor (Back-End Support for In-Home Paid Caregivers)

Founded by Seth Sternberg in 2014, Honor was launched as a software-enabled, direct-to-consumer home care service with paid care professionals to address the problems of scheduling, training, and optimization. Customer acquisition was challenging in the face of hyper-local markets and disaggregated industry demand. Every time it entered a new market, Honor needed to reinvent its go-to-market strategy, and it could not effectively compete with local mom-and-pop operations numbering over 14,000 nationwide. Instead, in 2018 Honor pivoted and began offering back-end support to these local providers to help optimize their work, utilizing the application of machine learning and Al-powered technology to reduce unstaffed caregiving hours from 10% to 1%. It sells its software now to other providers in a B2B strategy. Honor is often considered the bellwether for valuation in the home care industry, having raised its first round of \$20 million in 2015 and then acquiring Home Instead in 2021; their combined value is over \$2.1 billion.

Iris Plans (End-of-Life and Advance Care Planning)

The focus of this company is to help families have conversations with an expert guide on end-of-life care planning and to complete advance directives. It works directly with families, but it sells into healthcare plans and physician practices to manage the process. Its target is the 10 million people living with serious illness, and the \$270 billion spent on unwanted care, with a goal of lowering hospitalizations and associated costs. The emphasis on involving the family is unique, and it has enabled Iris to expand and grow. Utilizing a telehealth model, it provides a session of up to three hours to members in the health plans it partners with. Since Medicare now reimburses physicians for discussing advance care planning, growth has accelerated. Iris Plans has successfully expanded to multiple states.

Kinto (Care Navigation and Caregiver Training)

Kinto is a tech-enabled coaching service to train and support family caregivers of seniors with Alzheimer's disease and other serious health conditions. Its service is delivered via mobile app and combines three elements: One-to-one care coaching by trained experts, a personalized eLearning curriculum to address each family's specific needs, and peer support groups to enable caregivers to share knowledge, experiences,

and emotional support. Its paying customers are Medicare Advantage plans, large employers, and pharmaceutical companies.

Mon Ami (Social Isolation, Respite Care, and Intergenerational Engagement)

Mon Ami was started in 2018 to provide respite care to unpaid caregivers of family members. Initially it hired college and nursing students to visit the home and engage in activities while the caregiver could take a break, and it sold its services directly to consumers. During the pandemic, it expanded its client base and provided virtual support services for San Francisco's homebound seniors and adults with disabilities. It found that it needed to pivot its product offerings to include software technology sales to governments, nonprofits, and senior service organizations, and it expanded its customer acquisition strategy. Software products include volunteer management, case management, payments and reimbursement, and built-in reporting, such as helping older adults register for vaccine appointments.

Nymbl Science (Fall Prevention, Mobility)

This company, founded in 2014, uses a smartphone app to help users improve their balance skills by multitasking during balance training with balance and problem-solving mental training done simultaneously. It has worked with insurers, countries, and care facilities to provide this service to their constituents and members. The user is an individual in an at-risk demographic who is able to understand and use a smartphone. The customers are the insurers who have this as a supplemental benefit to their plans and then pay a PMPM (per member/per month) fee to the company. It has partnered with Cigna, the government of New Zealand, and several other large groups to provide this service. It has been demonstrating good results to date with fall reductions in at-risk populations. Its current goal is to expand into Medicare. The ability to show metrics and outcome data such as fall reductions is paramount to having payors such as health plans and Medicare purchase products.

Papa (Social Isolation, Respite Care, Care Concierge, Telehealth)

Papa provides older adults and families in all 50 U.S. states with companionship and care to support members of all ages socially and clinically. "Papa Pals" provide companionship and help with everyday tasks, and Papa services are available through health plan providers. Papa also offers comprehensive health management through its "Papa Health" sub-platform, with virtual primary care, urgent care, and chronic care management. Its targeted customers are Medicare Advantage plans and insurance companies. Traction includes 40 healthcare plans to date, 15,000 Papa Pals, and 1,000 physicians involved in Papa Health.

Seniorlink (Care Coordination Services)

Seniorlink is a tech-enabled health services company that builds care collaboration solutions to support family caregivers. The company serves patients and caregivers by partnering with risk-bearing provider and payer organizations to augment existing care management through solutions that leverage human touch and technology. Its customers are health plans, employers, and Medicaid.

Seniorly (Information Platform and Alternatives for Housing)

Seniorly offers an online platform that people can use to search by location and type of care or living situation needed – e.g., respite care, memory care, independent living, assisted living, to name a few. It offers pricing and navigation services, with multiple filters, to find the best fit for an individual's needs and provide referrals. Seniorly has expanded its offerings to include extensive educational resources, concierge-type services, and navigators to assist with moving and downsizing, reflecting the growing need to provide one trusted resource for a range of services.

Tomorrow Health (Wellness, Smart Homes, Transition Support, Health and Safety)

Launched in 2020 with the aim of leveraging AI, machine learning, and the internet of things by installing unobtrusive monitoring devices in the home to support "agers in place." These range from the very general (safety, communication) to the very specific (emergency response, fall detection, anomalous movement patterns). Tomorrow Health has a team of Care Advocates who assist patients and providers in understanding insurance benefits, provide guidance on product selection, and help with order replacement and issue resolution. The intent is to streamline ordering of home medical equipment and supplies. Pivoted from B2C to B2B with service providers already in the home and health plans such as Geisinger.

Others in this domain to assist agers in place include Touchtech, Sofihub, and Aloe Health Care. Highlights the need for a trusted source to evaluate tech-driven solutions in the home, and a scalable, certified talent pool to provide human curation for such solutions. The velocity of technology change in IoT renders specialized devices quickly obsolete, and the installed base cannot be remotely upgraded. Specialization leads to multiplication of devices in the home. Reliance on artificial intelligence and machine learning to solve the hardware upgrade problem is probably misplaced.

True Link Financial (Fintech, Financial Fraud Prevention)

True Link serves as a financial partner for vulnerable older adults, people with special needs, and those recovering from addiction. It can protect seniors from fraud, help people with special needs preserve lifesaving medical benefits, or prevent an impulsive cash withdrawal or purchase that could lead to relapse. Its customers include home care service providers, government partnerships, and families.

Vesta Healthcare (Care Coordination and Navigators, Telehealth)

Originally started as Home Team, it marketed to home care aides and struggled to grow. In 2018 the company expanded the care model to include the aides, family caregivers, and healthcare providers to form a "Care Team" and circles of care. It introduced technology that shares caregiver insights with the rest of the team and proactively identifies the need for additional resources in the home. In addition, it provides 24/7 telehealth support for caregivers and care recipients, with a focus on high-need, frail older adults.

Each caregiver is onboarded with technology through an iPad that Vesta provides, and they receive interactive training throughout the relationship. Caregivers can also press a button on the device to talk directly to a nurse who serves as a trusted resource to help keep people safe at home and often avoid emergency department use. It partners with home care agencies and health plans, and it is now a Medicare covered benefit. In April 2021, Vesta announced it had raised an additional \$65 million in growth capital, with total capital raised to date of \$95 million.

Wellthy (Care Coordination and Navigation)

Wellthy was cofounded in 2014 by Lindsay Jurist Rosner, after she had her own experiences as a caregiver and recognized the changing aging demographics. The company offers a complete range of products and services to employers, including a caregiving concierge to support families with complex and ongoing care needs for older parents, as well as children or family members with special needs. Wellthy connects employees with their own private Care Coordinator. The value proposition it sells is increased productivity, "presenteeism," increased employee loyalty, improved retention of high-value employees, and alleviation of employees' unspoken stress. Wellthy has established coverage for over 500,000 lives.

Wider Circle (Social Isolation and SDOH)

Loneliness is an epidemic, and it hits older people living alone especially hard. They engage in less healthy behaviors and find themselves readmitted to hospitals more often. Wider Circle was formed to make it easier for older adults to stay active and make new friends in a group setting close to home. Its "Connect for Life" program brings together neighbors to exercise, socialize, and improve their well-being in groups of 10 to 12. The program is free to individuals and is actually sponsored and paid for by their Medicare Advantage plans. Trained facilitators and member ambassadors lead regular meetings and outings and provide transportation, all which helps to reduce isolation and loneliness. During the pandemic, the company pivoted by partnering with Uber to have over 100,000 meals delivered to homebound seniors and transitioned to virtual support networks. Wider Circle has expanded to multiple states. Evaluation of participants shows that their members were admitted 27% less frequently to hospital, spent 43% fewer days in hospital, and have 12% more annual wellness visits and 32%

more flu vaccinations. These types of metrics are of increasing importance to health insurers.

Executive Roundtable: Opportunity Areas Identified

Opportunity: Defining Caregiving

Who Needs to Do What?

- Researchers and Educators: Ethnographers, social scientists, and analysts can create a taxonomy of tasks involved in caregiving, including non-measurable but essential services.
- Advocates: There is an urgent need to raise awareness, especially among employers, and for public engagement to raise the profile of caregivers and highlight the benefits they provide to society.
- Families: Caregivers and recipients need to communicate their roles and tasks. Incentives for sharing can include benefits such as direct compensation and the prospect of better care outcomes.
- Innovators: Startups need to develop technology solutions that capture caregiver roles and stress but do not dehumanize the care experience.
- Providers: Healthcare providers must integrate caregivers into the care teams and work out how best to make them effective.
- Payors: Insurers, employers, and benefit plans must incentivize and reward caregivers for sharing what goes on in the home environment.

Risks to Be Mitigated

- Privacy: Caregivers may not want employers or others to know that they're playing a caregiving role.
- Incentives: Patients and families won't share details of what happens in care settings if they suspect it'll be used to deny benefits.
- Industry Capture: The benefits of these efforts must be seen to accrue to families and their caregivers, not just to organizations.

Opportunity: Consumer Marketplace

- Demand can be boosted via models such as longevity insurance, which would fund products and services to keep people independent.
- Supply of relevant solutions will be improved via a solutions marketplace that matches available services with users' needs.

Who Needs to Do What?

- Lawmakers and Regulators: Public investment is needed in aging-service infrastructure, whether through existing area agencies or new public-private partnerships. Policy-makers must require or encourage the development of longevity insurance plans.
- Payors: Insurers will need to offer new customer-centric services that support the desire of people to live independently and help to lower their payouts.
- Innovators: New "insurtech" startups that offer services as well as insurance will enter the market, attracted by a broader population pool.

Risks to Be Mitigated

- Isolated seniors are increasingly the target of scams, as we've seen especially during the Covid pandemic.
- Removing the gatekeepers shouldn't mean everyone fending for themselves.

Opportunity: Open Aging Standards

- There is a lack of structured data about many aspects of aging, and the data that is available is often siloed.
- Medical records in acute-care settings are often locked down. But even more problematic, most of the relevant data is outside the medical space entirely.
- As such, it is hard to understand the status and needs of older adults, especially as they transition from home to care settings and back again.
- Similar to "open banking," open aging standards would allow information about individuals and their care team (such as languages, skills, preferences, needs, and goals) to be shared to improve experiences and outcomes.
- The vision is to develop a freely accessible, cross-industry model that allows sharing of health and wellness data with providers and trusted intermediaries.
- A charter of openness and customer-centricity must be built from the ground up. Data from a variety of sources (not just clinical data) must follow the individual and their caregiving team and not be locked up by any one provider.

Who Needs to Do What?

- Innovators: Developers need to build services with open APIs (application programming interfaces) to ensure data is shareable. Startups will be able to identify new opportunities for innovation.
- Providers: Companies need to demand interoperability and agree with competitors and supply chain partners on new structured data standards.
- Payors: Government and private payers must participate in the development of new models and update their operations. For example, case managers can improve the discharge experience across care settings by having a more complete picture of the care journey.

• Families: Caregivers and recipients need to do less. Less time-consuming reentering of information at every visit, chasing down records, and trying to connect the dots to improve their care.

Risks to Be Mitigated

- Privacy: Sharing personal health records carries significant risks.
- Execution Risk: This is a complex engineering job with multiple security and privacy issues as well as multiple stakeholders.
- Business Model: Open standards generate significant consumer surplus but can struggle to be sustainable.
- Industry Capture: Traditionally the voices of the older adult and the caregiver have not been as loud as that of providers and payers.

Opportunity: Longevity Insurance

- Seniors who want to remain in their homes face significant out-of-pocket costs.
- Medicare does not routinely cover these costs, and private insurance options are generally unavailable or unaffordable.
- New longevity insurance models would combine services to keep people
 healthy and independent as long as possible with an insurance payout that
 covers community- based services.
- Aging-in-place insurance that rewards people for living independently would be a novel approach. It could include access to products and services like smart home devices, home modifications, home caregiving, and care coordination.

Section IV: Mapping the Innovations Landscape

Caregiving Subdomains



Care Coordination



Care Navigation and Transition Services



Caregiver Quality of Life



Daily Essential Activities for the Care Recipient



Diet and Nutrition



Digital Inclusion, Access, and Literacy



End-of-Life Care and Planning



Fall Prevention, Detection, Mobility



Financial Caregiving



Fitness



Insurance and Reimbursement Navigation



Health and Safety Awareness



Medication Management



Personal Safety Monitoring



Life Enrichment and Empowerment





(P))) Sensory Aids

Social Well-Being

Transportation

Tech-Enabled Home Care

Telehealth for Older Adults

へ Wellness/Smart Home

Wearables

AARP Six Areas of Opportunity



2022 AgeTech Market Map



Aging 2.0 Eight Grand Challenges



Techstars Future of Longevity Accelerator

The Techstars Future of Longevity Accelerator, run in partnership with Pivotal Ventures, focuses on innovative solutions to address the unmet needs of older adults and their caregivers. <u>Program themes include</u>:

- Caregiver Support
- Care Coordination
- Aging in Place
- Financial Wellness and Resilience
- Preventive Health
- Social Engagement

2020 Techstars Accelerator Companies

- Authored
- Braze Mobility
- Candoo Tech
- ConnectCareHero
- Memory Well

- Naborforce
- Rezilient Health
- Rubitections
- Upside HoM
- Wysefit

2021 Techstars Accelerator Companies

- Abby by GogoTech
- Better Coliving
- Bright
- HealthHive
- Kinumi

2022-23 Techstars Accelerator Companies

- Advosense
- Cancer Mutual
- Carefluent
- Keep Company
- Lotus Labs

- MvFitPod
- OndeCare
- Saeidan
- Vivo
- Wave Therapeutics
- Penny Finance
- Reev
- Savvly
- Tuktu Care
- Zinnia TV

Innovation Gaps and Opportunities

There are multiple business opportunities, price points, and approaches to longevity readiness for care recipients and caregivers. More creativity and innovation will be needed to meet the challenges of aging in place and accommodate the evolving needs of caregivers and the family members they care for.



Housing and Home Modification

With over 90% of older adults wanting to age in place, one challenge is accessibility and stairs. How can we reconfigure access in homes? What are simpler and less costly solutions – the new "drone" of stairway access? What are the most essential modifications needed? How can construction and renovation companies supply creative solutions?

Preparing homes to be longevity-ready is one business opportunity. AARP provides a Home Fit Guide and checklist, but few caregivers and recipients know about it.



Housing Alternatives and Intergenerational Housing

It was refreshing to see Upside HoM in the first Techstars Longevity Accelerator, but the company still has to define its customer acquisition strategy. It has the opportunity to become a platform and a hub for a

range of services and products allowing its customers to age more successfully.



Longevity Health Services in the Home

The acceleration of telehealth due to Covid-19 will likely continue post-pandemic. It is especially valuable for older adults. Companies such as Tembo Health, Rezilient Health, and Vesta Health are focused on the telehealth needs of older adults. More companies will be

needed that feature easy access, quality control, continuity of care, and clear reimbursement mechanisms. "Hospital at Home" and "Healthcare at Home" will become more prevalent. Tailoring these concepts to caregiver and care recipient needs is both an innovation gap and market opportunity. Caregivers may in fact become health providers in the home, and a host of innovations to support that will be needed. (See: "The Future of Remote Care Technology and Older Adults.")



Digital Health and Wellness Tools and Assessment

Preventing cognitive decline is an ever increasing priority. There are new assessment and wellness tools in development, e.g., Nexus. Integrating such tools into comprehensive digital health systems would enable caregivers to assess and monitor older adults' functionality at home, potentially identifying trends to prevent crises and take steps to

promote a higher quality of life. Similarly, nutrition and exercise will be essential components of "longevity health" services.



Reviews of AgeTech Solutions

Related to the development of these tools, a trusted source is needed to evaluate tech-driven aging-in-place and longevity-health services. This could be part of the platform innovations discussed later or a separate enterprise. It would be the "Yelp" for aging in place and

caregiving tech solutions. Even more significant would be a Consumer Reports-style organization for aging that tests and validates innovations.



Fintech Solutions to Prevent Elder Exploitation

Financial planning and assistance is part of the caregiving journey. One of the key concerns is how vulnerable care recipients are to being exploited. Only 1 in 44 cases are reported, and they are frequently committed by a family member. The resulting losses are over \$9 billion per year. This is considered the crime of the 21st century. There are

several companies in this space, and there needs to be more. There also needs to be a mechanism by which these services can be certified. Current companies include Cake, Everplans, Eversafe, Free Will, and TrueLink. There is an urgent need for easy-to-use solutions that educate the caregiver and recipient, account for the financial caregiving being provided, and offer third-party accounting on a quarterly basis. As described

below, paying healthcare bills is a key challenge for caregivers, and tools and navigators can assist by providing new approaches while protecting the care recipient.



Navigators and Care Coordination

Healthcare, elder care, and longevity systems are hard to navigate. Navigators will become critical partners in healthy aging and caregiving. <u>Cake.com</u> positions itself as an end-of-life navigator and platform. Wellthy views its work as elder care/parent care navigators.

We need a wide range of companies to meet the variety of needs facing seniors and caregivers. This spectrum of needs requires different solutions at different stages. Services must be flexible and affordable. These can be developed with customers in mind such as Medicare Advantage and employers and employee assistance plans.



Medicare and Medicare Advantage Access and Enrollment

Trying to sign up for Medicare and knowing which part may require payment is not obvious to many. It is complicated. Medicare Advantage plans have grown and now offer a bewildering variety of benefits. There is a need for Medicare navigators to help with enrollment, optimize utilization, and explain the range of offerings. Enrollment in Medicare

would be an ideal time to also assist with completion and certification of advance directives and end-of-life planning.



Healthcare Bill Navigation

Utilizing the healthcare system and paying for the services can be a dizzying experience. Understanding billings, co-pays, out-of-pocket costs, and surprise medical claims are an increasing burden on the patient and the caregiver. Health bill navigators would be a welcome addition to the fintech solutions (see above) and an aid to caregivers.



Social Determinants of Health (SDOH)

Social isolation and loneliness will continue to be a significant challenge for older adults and caregivers. Naborforce, from the first Future of Longevity Accelerator, focuses primarily on intermittent services for seniors, providing significant companionship as a byproduct. Firms that can address these needs directly are essential. Nutrition will be another

key focus, as well as fitness and fall prevention. Novel approaches are needed. Caregiver burnout, as a unique SDOH, is among the subdomains that are in need of further innovation. Simply telling a caregiver to do more self-care, exercise, and yoga ignores the fact that they have little time and may not have other family members who can provide respite services. We envision novel solutions whereby Medicare Advantage

could pay for caregiver access to exercise and self-care as part of the caregiving ecosystem.



End-of-Life Planning

This sector involves over five different subdomains, including Legal Documents, Advanced Care Planning, Palliative and Hospice Care, Funeral and Burial Planning, and Legacy. Increasingly, there are platforms emerging to help coordinate all these components, to

promote dignity and honor the wishes of the care recipient. Cake is a comprehensive platform for all end-of-life planning. Free Will provides legal documents and opportunities for estate planning and intended donations. Vynca has evolved a digital platform focused on establishing and maintaining advance directives. However, this continues to be a very underserved area and a large market opportunity. More intergenerational tools and guides (e.g., The Conversation Project) will be enhanced if this could be done in a family-friendly context. Only 37% of Americans have advance directives for end-of-life care, and spending on Medicare beneficiaries in their last year of life accounts for about 25% of total Medicare spending on beneficiaries age 65 or older. 90% of adults would prefer to die in their home, but only 30% of Medicare beneficiaries actually do. If we were to create "national circles of care" for caregivers, these groups could support one another with accessing, utilizing, and implementing end-of-life planning tools. The market for palliative care alone is over \$30 billion.



Platforms

There are an abundance of small companies and services, but it remains challenging to match them with the many older adults and caregivers in an efficient way. Creating an integrated system where companies could list and promote their services, and older adults and caregivers could have access to these offerings, would greatly reduce the gaps in our

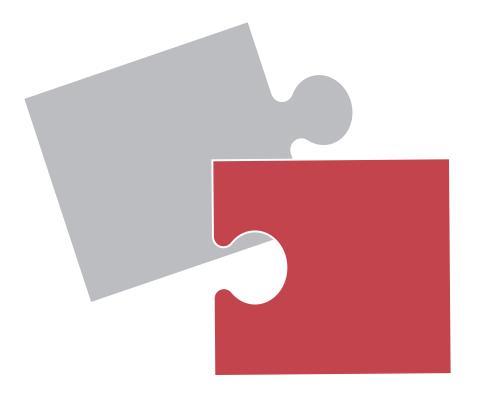
caregiving system. Al-enhanced tools could match people and solutions based on care needs and profiles. We believe there is an opportunity for the many different platforms, resources, innovations, and assessment tools to be housed under a National Caregiving Center, which could include assessment of care needs, links and referrals to resources by location, and a two-sided market solution that would provide access to customers and caregivers, and help companies reach their target audiences.



Multigenerational Teams

The common adage in designing products and services for older adults is to "design with, not for." It would be valuable to find companies with multigenerational teams or use the DCI Fellows as lead mentors to help

with product and service design.



APPENDIX PART II

LANDSCAPE OF CAREGIVING INNOVATIONS

Section V: The Future of Caregiving Solutions

Examples of Investors in Caregiving

Investors	Examples of Investments
7wire Ventures	Homethrive
Andreessen Horowitz	Bold, Honor, Tomorrow Health
Battery Ventures	A Place for Mom, ClearCare
Blue Venture Fund	Wider Circle
Canaan Ventures	Рара
Generator Ventures	Caremerge, True Link, Vynca
Go Ahead Ventures	Cake
GSR Ventures	Cherry Labs
Kaiser Ventures	Hometeam
Lightspeed Ventures	Curve Health
Magnify Ventures	Рара
Maverick Ventures	Mon Ami
NEA	SafeRide Health
Oak HC/FT	Vesta, Bold
OCA Ventures	Cake
Pear Ventures	Fair Street
Pillar VC	Cake

Pivotal Ventures	Papa
Portfolia	Chronicled, Envoy
Primetime Partners	Bold, Carewell, Tembo Health
Redesign Health	Duos, Jasper, Keen
Springbank Collective	Aloe Care Health, Wellthy
Third Act Ventures	Roobrik, Care.Coach
Thrive Capital	Honor, Umbrella
Town Hall Ventures	Signify Health, WelbeHealth
Two Lanterns Ventures	Cake
Ziegler Link-Age Funds	Bluestar SeniorTech, CareLinx



Educational Opportunities

We identified a series of educational priorities that would accelerate caregiving and innovations.

- 1. Educate innovators about the challenges in the marketplace, as outlined in Section III.
- 2. Educate investors about the magnitude of the potential market, and the challenges inherent in the fact that payors are often not the end users.
- 3. Educate the public about the value of the family caregiver, and encourage and enable caregivers to self-identify.
- 4. Educate families about the question of who pays for elder care and long-term healthcare. Since Medicare generally doesn't cover long-term care, most middle-income seniors won't be able to afford all the assistance they need.
- 5. Educate voters on the need for better policies to support caregivers, as outlined in Section V. For example, in 2019, landmark legislation in Washington state created a fund to provide financial assistance for long-term care. The first program of its kind in the nation, the WA Cares Fund is paid for by a new 0.58% tax on employee wages beginning in July 2023. This will help to offset the needed savings to prepare for longer lives. Employees with long-term care insurance are exempt. The trust program will provide long-term care for a lifetime maximum of \$36,500 per person, and qualified family members acting as caregivers are eligible to receive payments for their services.

Section VI: Bringing the Pieces Together

Communication Strategies: Key Considerations

If we understand the caregiver, we can better understand how to reach them.

- Who are they?
- What matters to them?
- How/where/when to convey information for ease of use
- Obstacles: complexity, cost, time, language, educational level

The following variables will influence any communication strategy. Several initiatives from the public sector have successfully integrated many of these components, including the Caring Across Generations and Care Can't Wait campaigns, as well as many state campaigns funded through foundations.

Caregiving Audience

- Family members
- Usually women, middle-aged
- Are they employed? full-time or part-time?
- Also caring for children?
- Financial situation and constraints

Deeper Dive

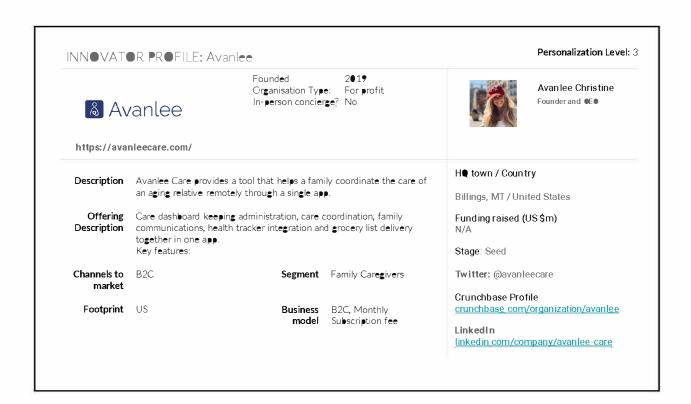
- Check the assumptions on demographics
- Caregivers are not a monolithic group
 - o Gender
 - o Age
 - o Educational background
 - o Ethnic background
 - o Religion
 - o Politics
 - o Urban/rural/suburban
- Where do they live?
- Where do they shop?
- How do they spend their time?
- Social media presence and If so, which platforms
- What are they not doing when they spend time as a caregiver
- What is the cost to them of being a caregiver?
 - o Stress and mental health
 - o Spouse interactions

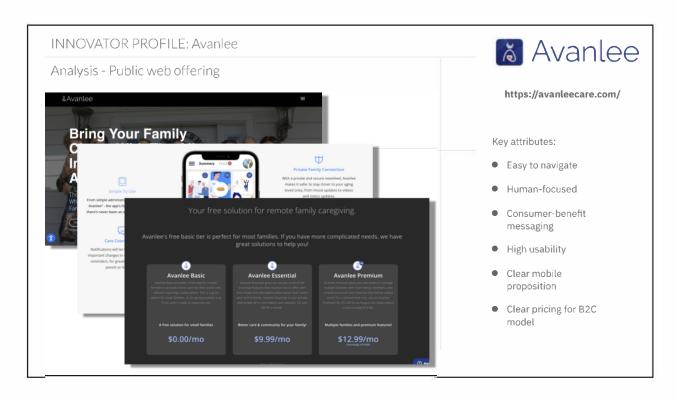
- o Family discord
- o Financial burdens
- o Professional costs (advancement, promotions)
- Who are their allies? What support systems do they have?
 - o Family
 - o Neighbors
 - o Church
 - o School
 - o Other parents
 - o Other caregivers
 - o Work
- Where do they already get their information?
 - o Local, regional, national media
 - o Church
 - o School
 - o Politicians
 - o Community members
 - o Leaders
 - o YMCAs
 - o Women's groups
 - o Voting groups
 - o Community organizers
 - o Police
 - o Nurses
 - o Doctors
 - o Hospitals, health care systems
 - o Social media
 - o Nonprofits
 - o Civic organizations
- Whom do they trust (or, importantly, not trust)?
 - o Institutions (banks, hospitals, churches, businesses, government)
 - o Distributed trust (friends of friends, loose connections)
 - o Individuals
 - o Trusted allies
 - o Community leaders and influencers

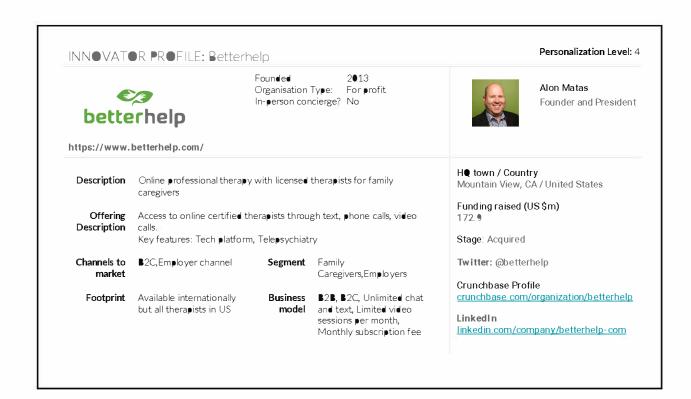
Profiles of Existing Care Hubs

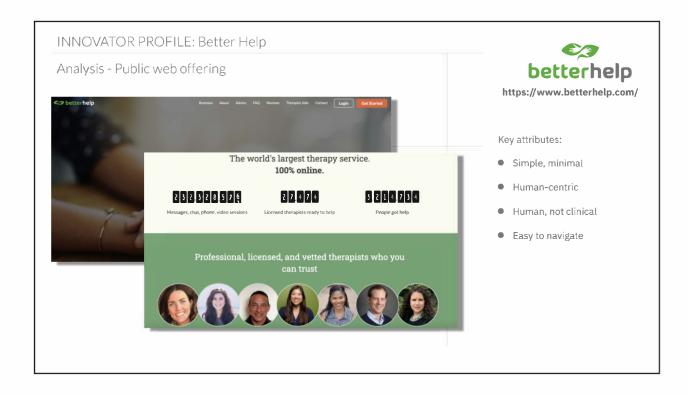
There are both nonprofit and for-profit organizations that currently offer a form of care hub for information or services. Each focuses on one or more caregiving needs and could be integrated into a comprehensive Care Connector. Examples include the following, and we include profiles of each of these below:

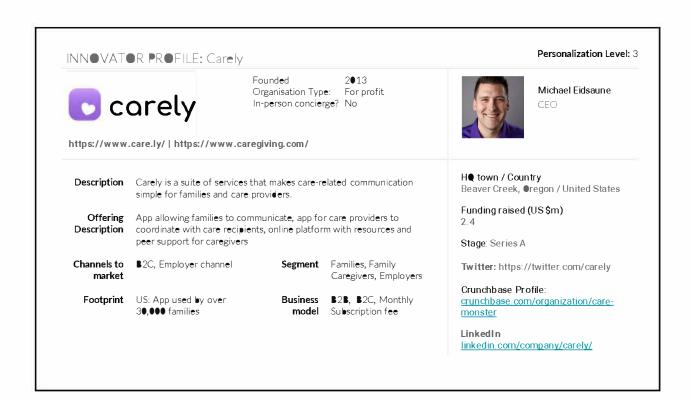
- Avanlee
- BetterHelp
- Carely/Caregiving.com
- Carenav
- CareTribe
- Cariloop
- Daughterhood
- Findhelp (Aunt Bertha)
- Givers
- Helper Bees
- Homethrive
- lanacare
- Kinumi
- Tribe
- USAging
- VirginiaNavigator
- Wellthy

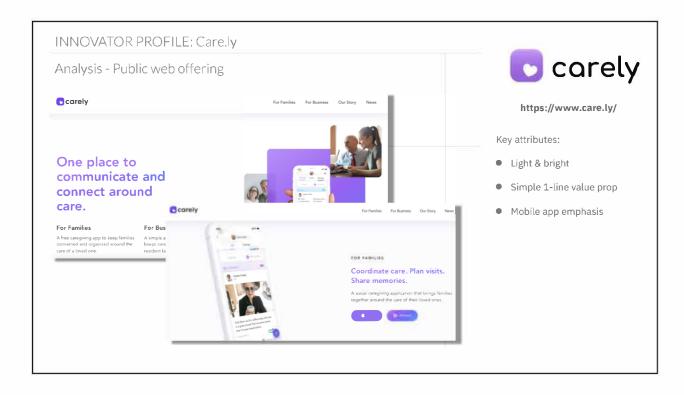












INNOVATOR PROFILE: Carenav (FCA)

Personalization Level: 3



Founded 1977 Organisation Type: Non-profit In-person concierge? Yes



Kathleen Kelly **Executive Director**

https://www.caregiver.org

Description Enabling families navigating social care with customized resources, help

connecting to local services, personalised consulting on a dashboard.

Product of Family Caregiver Alliance

Offering Dashboard containing customized action plan for care (after Description

completing survey), personalized resources (videos, factsheets), referrals to local resources, opportunities to communicate with family

Key features: Consumer-facing, Network, Resources, Tech platform

Channels to market AAA, Non-profits, Govt organizations, \$2C

USA: Info in all states. Footprint

Focus on SF Bay Area

Segment Family Caregivers

Biz Model Govt subsidized -free

H● town / Country

San Francisco, CA / United States

Funding raised (US\$m)

Stage: Nonprofit

Twitter: @CaregiverAlly

Crunchbase Profile

crunchbase com/organization/family-

caregiver-alliance

LinkedIn

Jinked in.com/company/family-caregiver-

alliance

INNOVATOR PROFILE: Caretribe*

2019 Organisation Type: For profit In-person concierge? No

*Acquired by <u>Cleo_in May</u> 2●22

https://caretribe.com/

Description End-to-end digital platform for caregivers supporting their practices and mental health through personalized support. Part of Cleo

Offering Digital platform offering personalized action plans, recommendations Description of employer/health plan benefits, marketplace of products/services

supporting needs of caregivers, personalized support with social workers. Key features: Coaching/Consulting, Consumer-facing,

Network, Provider Tools, Resources, Tech platform

Channels to Employer channel,

market B2C, Health insurance

Segment Family

Caregivers, Employers

Footprint 100+ employers

Business B2C, B2B, Monthly model Subscription fee

Jeff Jacques Co-founder & CEO

Personalization Level: 4



H● town / Country

San Francisco, CA / United States

Funding raised (US\$m)

Stage: Acquired

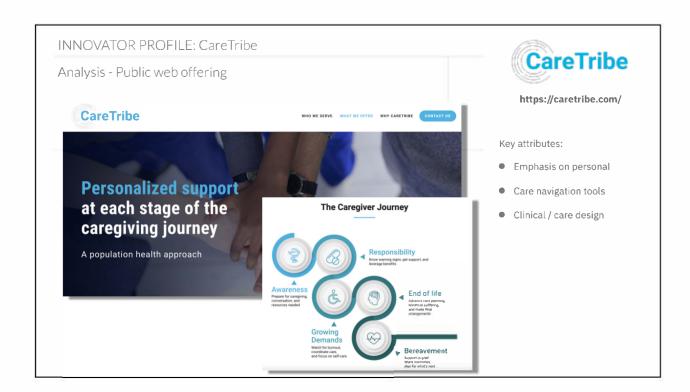
Twitter: @Caretribel

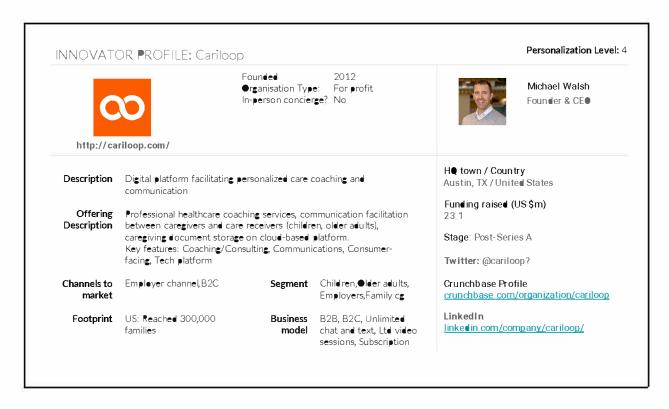
Crunchbase Profile

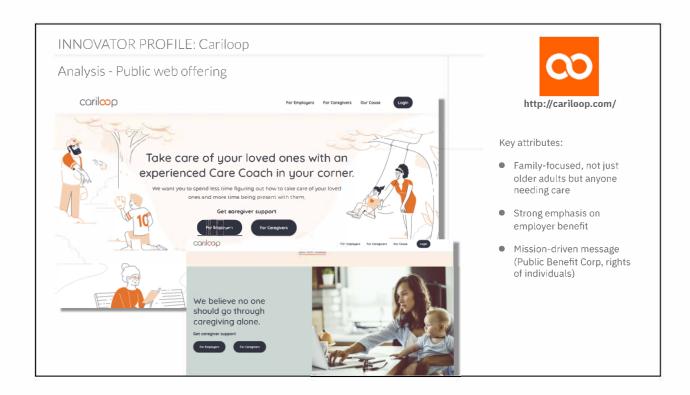
crunchbase com/organization/cleolabs

LinkedIn

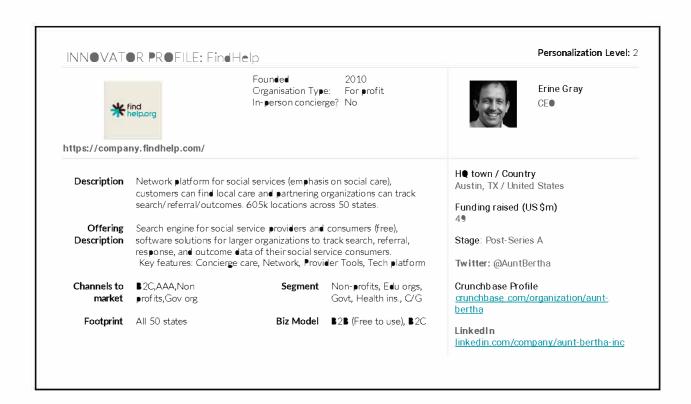
Jinkedin.com/company/caretribe-inc-

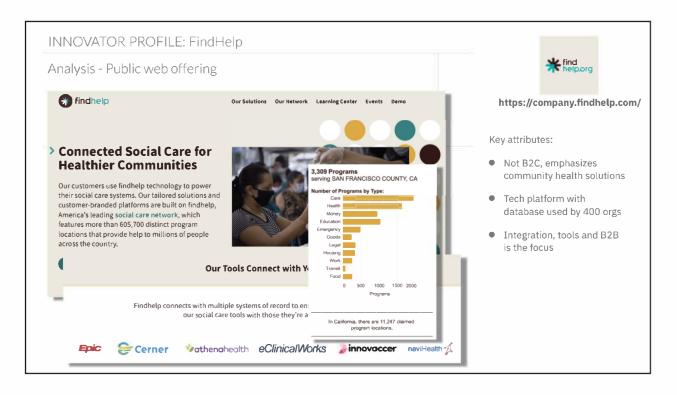


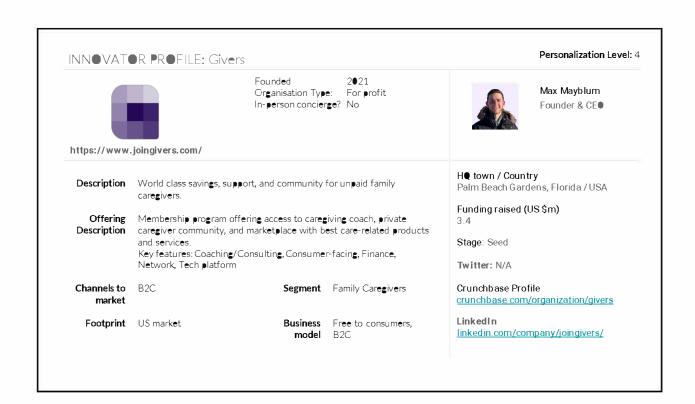


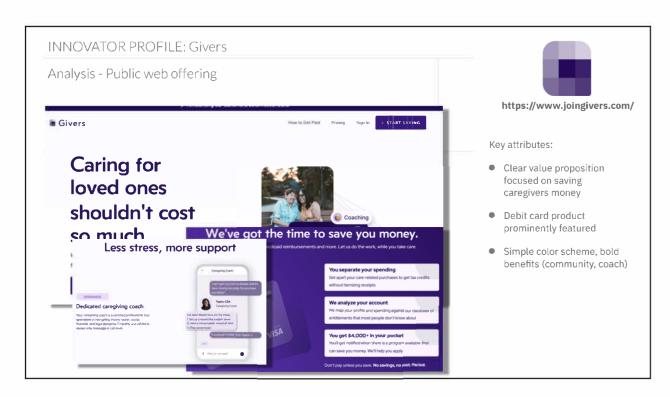












INNOVATOR PROFILE: The Helper Bees

Personalization Level: 3



Founded 2015 Organisation Type: For profit In-person concierge? Yes



H● town / Country

Char Hu

https://www.thehelperbees.com/

Description Platform providing affordable at-home caregiving for families, and data

and software solutions for insurance companies and health plans

Offering For insurance companies digital invoicing products reduce carrier costs, prevent fraud, and enables scalability. Powered by at-home data Description

tracking and analytics. For families: curated matching of caregivers, wellness program, marketplace portal.

Key features: Concierge care, Consumer-facing, HIPAA-compliant,

Network, Provider Tools, Resources, Tech platform

Health insurance, B2C Channels to market

Segment Families, Insurance

Footprint US: all 50 states

Stage: Series A

Twitter: @thehelperbees

Austin, TX / United States

Funding raised (US\$m)

Crunchbase Profile

crunchbase com/organization/the-

helper-bees

LinkedIn

Jinkedin.com/company/the-helper-bees/

INNOVATOR PROFILE: Homethrive



2012 Organisation Type: For profit In-person concierge? No

Biz model B2B. B2C.

Dave Jacobs Co-CE●

Personalization Level:4

https://www.homethrive.com/

market

Description Homethrive helps older adults live at home while reducing the stress,

strain, work, and worry for their family members- benefiting

employers, families, and insurers

 $\textbf{Offering} \quad \text{Digital assistant with personalized coaching, navigation, resources and } \\$ Description 1:1 human support for families, caretaker employees, and older adults.

Key features: Applied Al, Coaching, Consumer-facing, Tech platform

Channels to Segment Older adults, Families, Family Employer

channel, Health Caregivers, Employers, Insurance/He insurance, B2C alth plan

B2B, B2C, AI models, Unlimited Footprint US Business model

chat and text, Freemium. Subscription fee

Funding raised (US \$m)

Northbook, IL/United States

H● town / Country

Stage: Post-Series A

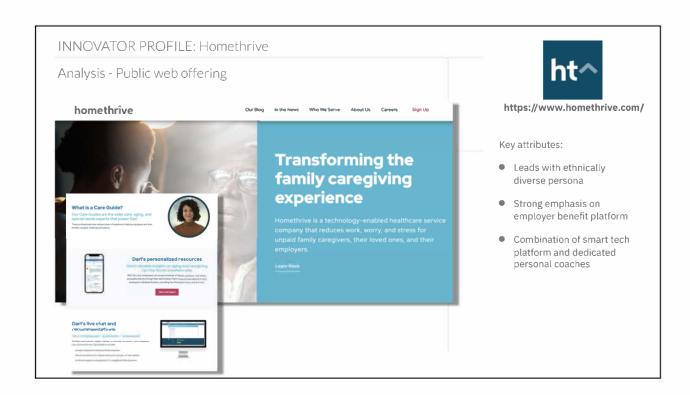
Twitter: @home_thrive

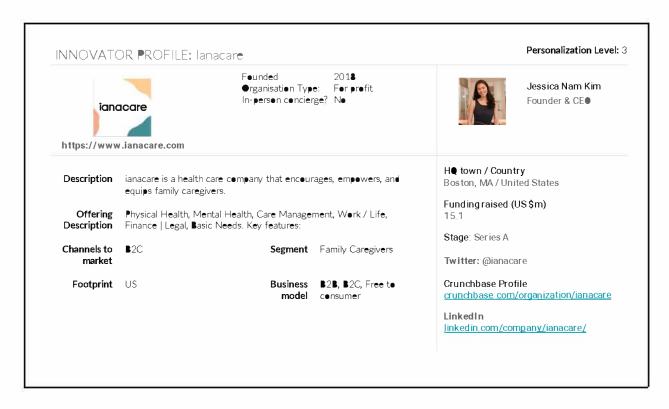
Crunchbase Profile

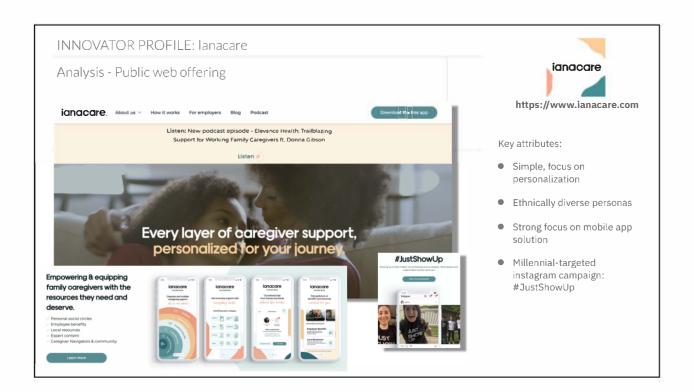
<u>crunchbase</u> <u>com/organization/homethriv</u>

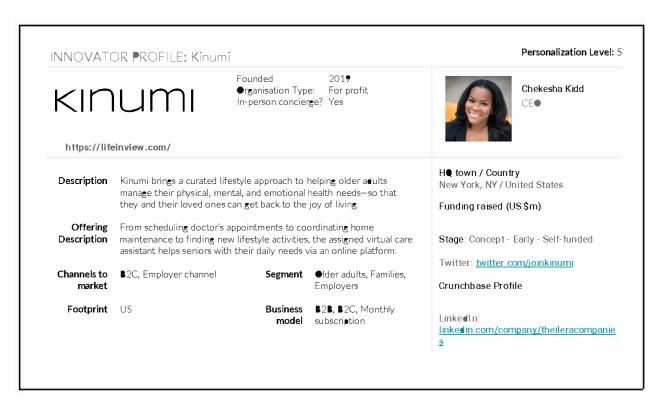
LinkedIn

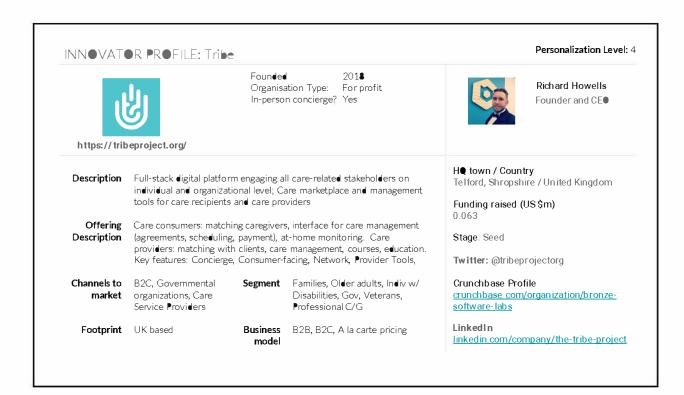
linkedin.com/company/homethrive-inc

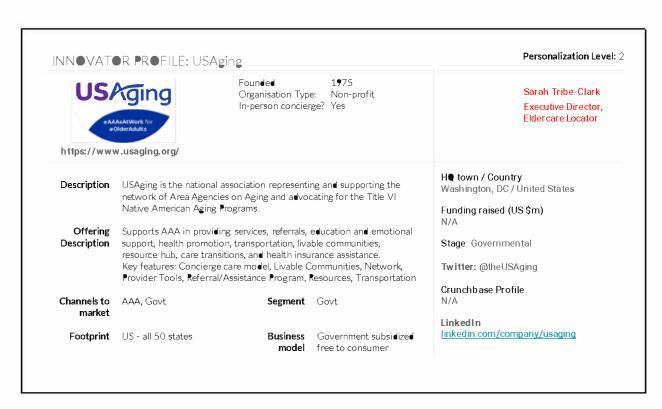












INNOVATOR PROFILE: Virginia-Navigator

Personalization Level: 1



Founded 2001 Organisation Type: Non-profit In-person concierge? Yes



Adrienne Johnson **Executive Director**

https://virginianavigator.org/

Description Providing free information about health, aging, disability, and post-

military resources and services to Virginians

Search engine connecting consumers to information and services Offering Description

related to aging, disability, veterans. Physical navigator centers provide free access and assistance to website for those without internet. Key features: Consumer-facing, Network, Resources, Tech platform

Channels to market

Segment Veterans, Older adults,

family C/G, Individuals w/ Disabilities, Families

Footprint US - Virginia only **Business** Free to consumers

model

H● town / Country

Chesterfield, VA / United States

Funding raised (US\$m)

Stage: Nonprofit

Twitter: N/A

Crunchbase Profile

N/A

LinkedIn

linkedin.com/company/seniornavigator/

INNOVATOR PROFILE: Wellthy

2014 Organisation Type: For profit In-person concierge? No



Lindsay Jurist-Rosner

Personalization Level: 4

https://wellthy.com/

Description Wellthy is a family care concierge service that brings relief to families

managing complex or ongoing care situations.

Offering Families: care dashboard keeping administrative tasks, conversations, Description and documents in one place, assigned professional guiding through

care. Employers: increase productivity of employees. Health plans: connecting members to high-quality services, improve quality ratings, minimize medical costs, increase member retention. Key features: Coaching, Communications, Consumerfacing, Document Storage,

Tech platform

Channels to Employers, Healt

market

h ins B2C

Segment Families, Employers, Insurance/Health

plan, Family Caregivers

Footprint US nationwide Biz model B2B, B2C, Subscription based H● town / Country

New York, NY / United States

Funding raised (US \$m)

Stage: Post-Series A

Twitter: @wearewellthy

Crunchbase Profile

crunchbase.com/organization/wellthy-2

LinkedIn

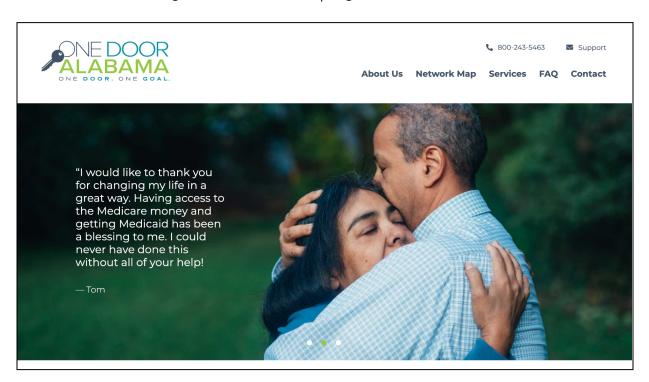
linkedin.com/company/wellthy

State Initiatives

The Care Connector would integrate existing government-sponsored efforts and platforms specific to individual states. We reviewed many state initiatives, including the following:

Alabama

Housed within each Area Agency on Aging is an Aging & Disability Resource Center (ADRC). This is the first place to go with aging, disability, and caregiver questions. This program, known as One Door Alabama, provides free information, counseling, and access to programs and services provided by the Alabama Department of Senior Services, other state agencies, and federal programs.



During normal business hours, each ADRC will:

- Have a live person answer the phone
- Screen for programs and services
- Assist with application processes
- Answer questions
- Refer applicants to other agencies
- Follow up as needed

Services available through One Door Alabama include crisis support, transportation,

food assistance, legal assistance, in-home services, senior employment, elder abuse prevention, long-term care advocacy, caregiver support services, prescription drug assistance, and Medicare and Medicaid counseling.

Indiana

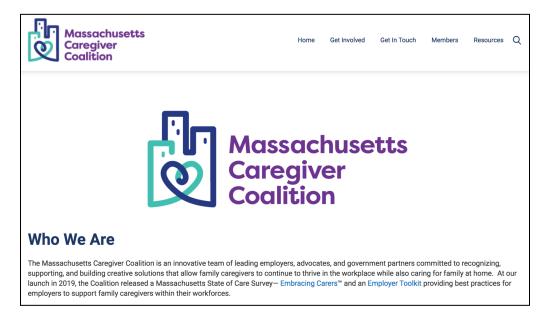
The state of Indiana is moving toward managed long-term-care services and support for its citizens over age 60 on Medicaid. Aging & In-Home Services of NE Indiana (AIHS) has been designated by the Administration for Community Living as the Community Care Hub of Indiana. AIHS, in collaboration with the Central Indiana Council on Aging and other key Area Agencies on Aging, are developing the Hub model to facilitate contracting by managed-care organizations with a network of community-based service providers. It centralizes administrative functions and operational infrastructure, including contracting, payment, management of referrals, quality control, technology, information security, data collection, and reporting. AIHS is also testing a "from hospital to home" model for patients with Alzheimer's and their caregivers, funded by the Administration on Community Living.

The mission of the Indiana Community Care Hub is to provide services across the state to meet the "health-related social needs" of citizens and their informal caregivers, increase participant satisfaction, lower healthcare costs, and expand service offerings through the economies of scale of statewide partnerships.



Massachusetts

Massachusetts has a number of excellent programs, including the <u>Massachusetts Caregiver Coalition</u>, the <u>Massachusetts Employer Toolkit to Support Working Caregivers</u>, and the <u>Massachusetts Healthy Aging Collaborative</u>.

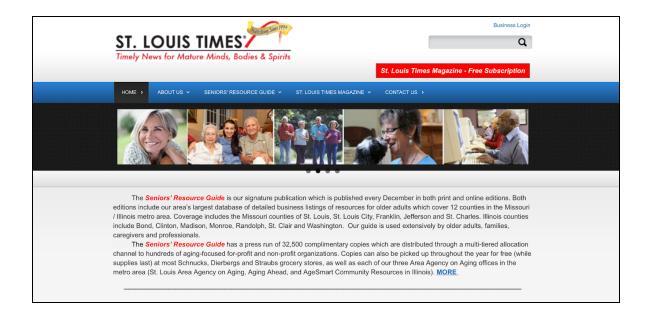




Missouri

The St. Louis Times publishes an excellent Seniors' Resource Guide:

- 300 pages, 30 categories, updated annually
- Very loyal readership and advertisers; 85% ads on multiyear contracts
- Free online newsletter, twice a month, 9,000 subscribers



New York



New York state provides a wealth of resources for aging New Yorkers and their

caregivers. Information about these programs is disseminated through:

- A robust website: https://aging.ny.gov
- Multiple press releases
- Live events
- Virtual events
- Letters to employers
- Communications with providers
- Website a wonderful resource, intuitive and easy to navigate. The opening page has a banner that lets you select Programs and Services, Get Assistance, and more.

Rhode Island

Rhode Island has a number of excellent programs, including DigiAge, which helps older adults develop digital literacy and connect to important resources and solutions.



Most of us today use digital platforms for shopping, banking, socializing, and finding service providers. But Rhode Island found that a quarter of its seniors weren't connected, so the state launched the DigiAge collaborative. A partnership of industry, government, and community groups, it aims to bridge the digital divide for older adults. The program provides specialized devices, assists with internet connectivity, offers training, and creates online content for older adults and those living with disabilities. Financing is available for adaptive communications equipment.

Virginia

Virginia provides a range of helpful services, including an excellent navigational tool and a hub for local services that is part of the No Wrong Door network.



No Wrong Door supports older adults, caregivers, individuals with disabilities, veterans, and families. Linked by a secure online system, this statewide network allows residents to connect to needed services.

Metrics for a Care Connector Platform

The Care Connector will need to measure utilization by caregivers, by type of caregiver, and by successful solution matches. The venture firm Andreessen Horowitz has outlined 16 key metrics for these types of platforms, which they call the "passion economy." These could be incorporated in the Care Connector. They fall into five categories:

- 1. Success metrics
- 2. Revenue metrics
- 3. Engagement metrics
- 4. Growth metrics
- 5. Community-related metrics

Success Metrics

Success metrics are a measure of whether creators are obtaining value from a platform. For passion economy companies, that's tied to earning revenue.

1. Conversion of free fans to supporters and subscribers

Measuring the conversion rate of free users to purchasers or subscribers tells you how effectively your platform allows creators to monetize their audience.

2. Total creators with sales

Total cumulative creators with sales is a measure of overall platform health. In addition, this metric should also be tracked for given time periods: Creators with sales in a single week or month measures activation.

3. Creators who have reached a certain revenue threshold

Measuring creators who earn over a certain amount of revenue is a way to assess how important your platform is as a source of earnings.

Revenue Metrics

These metrics help startups understand the volume and predictability of user demand for whatever creators are selling.

4. Gross transaction value (GTV) or gross subscription value

This is the total transaction volume flowing through your system (also referred to as gross merchandise volume, or GMV). It's a measure of total user demand. GTV can also be a driver of revenue if the business model charges a payment processing fee or other take rate.

5. Monthly recurring revenue (MRR) and annual recurring revenue (ARR)

We see two predominant business models in the passion economy: SaaS (software as service) or a take rate of creator revenue (GTV).

6. Average selling price (ASP)

Average selling price determines whether a creator needs 1,000 True Fans or just 100.

7. Share and sources of earnings

Though challenging to assess, it's useful to understand how much your creators are earning in total versus from your platform alone. Measuring this could take the form of surveying creators about their sources of revenue. In other words, how indispensable is your platform in supporting the creator's business?

8. Revenue retention (creators & audience)

This metric is also borrowed from the SaaS world. Of users who purchase, how does their spending in month 6 or 12 compare with month 1? Is the user spending more over time?

Engagement Metrics

Like ad-driven platforms, engagement metrics matter for the passion economy, but for a different reason: Engagement is a leading indicator for whether users have high propensity to convert to purchase—as well as whether creators will stick around.

9. Fan engagement rate

Measuring engagement with content can be a leading indicator for subscription retention. For instance, for newsletters in all industries, the average unique open rate is 21 percent. Massive open online courses (MOOCs) have an average completion rate of 5 to 15 percent. For paid versions of these formats, where fans are directly paying a creator, ideally engagement should be higher.

10. Loyalty and retention of fans

The nature of fan support can vary widely: They may be lifelong customers, or only pay during a set time frame or program. Diagnosing user churn is important. It could be that creators aren't producing content with the frequency that their subscribers expect. If churn is high, it might benefit your business to provide guidance for creators on best practices. Alternatively, perhaps the product itself needs to be tweaked in order to facilitate ongoing, rather than one-time, value.

11. Creator retention and churn

It's equally important to measure how many creators continue to use the platform and make sales. Depending on how the platform works, creator churn could be measured as creators who are turning off monetization, inactive, or leaving the platform altogether.

Growth Metrics

The acquisition efficiency of many passion economy platforms stems from the fact that many creators bring their own audiences. These growth metrics capture the extent to which that's the case, as well as the flywheel of new creators leading to audience growth leading to more creator growth.

12. The flywheel

Percentage of fans that become creators, creators bringing new creators, fans bringing new fans.

13. Creator affinity and value

For any new passion economy platform, it's necessary to identify creators who are most likely to be successful in monetizing their audience. This metric doesn't measure the health of your platform itself, but it can be an important signal in identifying which creators to target and onboard to your platform.

14. Acquisition costs and channels for creators and users

How much does it cost to acquire creators and users? This metric is all about understanding the scalability and efficiency of different acquisition channels.

Community-Related Metrics

The following metrics apply to platforms that are facilitating fan-to-fan interactions. Social features enhance stickiness and can help users get more value out of their purchases by enabling discussion and connection with like-minded individuals.

15. Intra-audience interactions

How much are audience members interacting with each other, in addition to the paid content? There's no one single way to measure it, but examples of metrics to capture this include engagement rates (commenting, liking, friend-ing) with other users, ratio of content contributed by the community versus the creator themselves, etc.

16. Network effects

There are a few types of network effects in the creator world. For marketplaces that enable the discovery of new creators, it's useful to measure the percentage of activity or transactions originating from within the network itself, as opposed to external sources. For platforms that enable community interaction, it's helpful to measure activity cohorts: Ideally, users become more active (and derive more value from the community) when there are more fans to engage with. The power user curve also suggests the presence of network effects.

Caregiver Profiles: Persona Prototypes

The AARP created 11 different caregivers profiles as part of its *Caregiving in the U.S. 2020* report. These help to emphasize the wide range of backgrounds, circumstances, and needs among caregivers. Solution providers must recognize this diversity and not expect to apply a one-size-fits-all approach. These caregiver prototypes include:

- The "Typical" African American Caregiver (PDF)
- The "Typical" Asian Caregiver (PDF)
- The "Typical" Hispanic Caregiver (PDF)
- The "Typical" LGBTQ Caregiver (PDF)
- The "Typical" Gen X Caregiver (PDF)
- The "Typical" Millennial Caregiver (PDF)
- The "Typical" Student Caregiver (PDF)
- The "Typical" High-Intensity Caregiver (PDF)
- <u>The "Typical" No-Choice Caregiver (PDF)</u>
- The "Typical" Feeling Alone Caregiver (PDF)
- The "Typical" Rural Caregiver (PDF)

What follows is an example of these profiles, for the "typical" Millennial Caregiver:

Fact Sheet

The "Typical" Millennial Caregiver

National Alliance for Caregiving AARP

WHO, CARING FOR WHO

Millennial caregivers are 30.2 years old on average and are the most diverse generation of caregivers (race/ethnicity, gender, and sexual orientation). Millennial caregivers are more often single (never married) and have lower household incomes than older generation caregivers. They typically are caring for a parent or grandparent who is 59.5 years old with 1.8 conditions; typically a long-term physical condition, followed by a short-term physical condition or emotional/mental health problem.

DOING WHAT, WITH WHAT OTHER HELP

Millennial caregivers have been providing care for a comparatively short period of 2.9 years, spending 24.8 hours a week helping with 1.8 ADLs, 4.3 IADLs, and medical/nursing tasks, placing most in a moderate-to-high intensity care situation. Half are the sole unpaid caregiver and fewer report having paid help (compared to older generation caregivers).

WORK AND FINANCE

Millennial caregivers are typically working while providing care, usually at an hourly position working 37 hours a week. They are less likely to report their supervisor at work is aware of their caregiving role, but are most likely to have received a warning about their performance or attendance at work. Millennial caregivers more often report high levels of financial strain and financial impacts (2.4) as a result of caregiving, such as taking on more debt, leaving bills unpaid or paying late, borrowing from friends or family, and being unable to afford basic expenses like food.

HEALTH AND WELLBEING

Caregiving is moderately-to-highly emotionally stressful for Millennial caregivers and about half feel they had no choice in taking on their role. Most believe their role as a caregiver gives them a sense of purpose. Millennial caregivers are least likely to report having health insurance and a greater proportion report being in fair or poor health (as compared to the 2015 study).





© AARP 601 E Street, NW Washington DC 20049

SERVICES & SUPPORTS

Reflecting their financial difficulties, Millennial caregivers are more interested than older caregivers in help or information about managing their own finances. They also more often have difficulty finding affordable services in their recipient's community than Baby Boomer caregivers. Millennial caregivers are most likely to want doctors or other care providers to ask them about their own self-care needs.

- 1 National Alliance for Caregiving (NAC) and AARP, Caregiving in the U.S. 2020 (Washington, DC: NAC and Washington, DC: AARP, May 2020).
- 2 ADLs include those tasks that provide assistance with basic personal tasks such as bathing, dressing, using the toilet, transferring to or from a bed or chair, caring for incontinence. and eating. IADLs are supports for everyday tasks, including housework, managing money, taking medication, shopping for groceries or clothes, using communication devices (like telephones), and caring for pets, among others. For more information, see https://longtermcare.gov/the-basics/.

About the National Alliance for Caregiving

Established in 1996, the National Alliance for Caregiving is a non-profit coalition of national organizations focusing on advancing family caregiving through research, innovation, and advocacy. The Alliance conducts research, does policy analysis, develops national best-practice programs, and works to increase public awareness of family caregiving issues. Recognizing that family caregivers provide important societal and financial contributions toward maintaining the wellbeing of those they care for, the Alliance supports a network of 80+ state and local caregiving coalitions and serves as Secretariat for the International Alliance of Carer Organizations. Learn more at www.caregiving.org,

About AARP

AARP is a nonprofit, nonpartisan organization, with a membership of nearly 38 million, that helps people turn their goals and dreams into real possibilities, strengthens communities and fights for the issues that matter most to families such as healthcare, employment and income security, retirement planning, affordable utilities and protection from financial abuse. We advocate for individuals in the marketplace by selecting products and services of high quality and value to carry the AARP name as well as help our members obtain discounts on a wide range of products, travel, and services. A trusted source for lifestyle tips, news and educational information, AARP produces AARP The Magazine, the world's largest circulation magazine; AARP Bulletin; www.aarp.org; AARP TV & Radio; AARP Books; and AARP en Español, a Spanish-language website addressing the interests and needs of Hispanics. AARP does not endorse candidates for public office or make contributions to political campaigns or candidates. The AARP Foundation is an affiliated charity that provides security, protection, and empowerment to older persons in need with support from thousands of volunteers, donors, and sponsors. AARP has staffed offices in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. Learn more at www.aarp.org.

THIS REPORT WAS MADE POSSIBLE WITH GENEROUS SPONSORSHIP FROM























These profiles are helpful in creating specific personas to test how well a Care Connector can support the needs of different people. Here are some examples:

PERSONA DESCRIPTIONS (US DATA)

Gina - African American caregiver

Хx

Gina's situation. Gina cares for four people in total: two of her five children and both of her parents. Gina has a 14-year-old son with undiagnosed schizophrenia and diabetes, an 11-year-old son with autism, a father with heart disease, and a mother recovering from a brain turnor. Gina's father had open-heart surgery in 2019 and has no vehicle of his own.

Activities. Although Gina lives an hour away from her parents, she takes her father to his post-surgery doctor appointments. Her mother has had three brain surgeries to help treat her brain tumor, and requires an increased level of care. Gina helps with activities of daily living, and her mother needs to be watched constantly due to the dementia-like symptoms.

Challenges. Gina finds caregiving most challenging with all the appointments she has to juggle in order to care for four people. No one has offered her resources or ways to find help, and Gina has had to do the research on her own time. Like many African Americans, Gina's culture has affected her caregiving in that she believes family should take care of family.

Potential solutions: Gina believes workplaces need policies that prevent them from penalizing or firing caregivers who need time off to provide care. Second, she believes there should be compensation to caregivers who are not able to work a traditional job while caregiving. Family caregivers are performing a vital job and should be supported.

Source: Adapted from 'Gina', Slide 19, NAC Diverse Caregivers Report, Nov 2021



28.1%

WHICH REPRESENTS
APPROXIMATELY THIS
MANY AMERICANS

OF CAREGIVERS ARE AFRICAN AMERICAN

8.3M

About African American caregivers

African American caregivers were, on average, 47.7 years old and typically caring for a parent, spouse, or grandparent who is 64.9 years old and has 1.7 conditions; usually a long-term physical condition. 45 percent of African American caregivers reported living in the same homes as their care recipients, compared to 36 percent of Non-Hispanic White caregivers. African American caregivers earn less income and work more hours compared to Non-Hispanic White caregivers African American caregivers take part in more hours of care and more high-touch activities of daily living as well as instrumental activities of daily living.

PERSONA DESCRIPTIONS (USDATA)

Rey - Asian American and Pacific Island (AAPI) Family Caregiver



Rey's situation. When Rey immigrated from the Philippines in 1989 as a teen, he made his home in Los Angeles, earned his MBA, and worked in biotech. In 2014, Rey's father had a stroke, and Rey left LA for to St. Louis to take care of him. Rey now lives with his parents, and though his father requires the bulk of care, his mother also needs support.

Activities. Rey assists his father with many activities of daily living: he makes his food, takes his blood pressure, administers medication, helps him shower, and prior to the COVID-19 pandemic, took him to multiple therapy sessions, support group meetings, and medical study sessions. He also support his mother with her underlying conditions.

Challenges: Rey called the information they received "inadequate." they had no idea what next steps were. Rey had to chase down resources in support groups he found on his own, and since most of his family lives in LA, he was the solo caregiver. Rey usually finds his selfcare in exercise, so not being able to go to the gym is an added stress.

Potential solutions: Rey recommends easy and affordable access to paid caregiving help, services, and products that will allow people to live at home longer with health conditions. He acknowledges that it can be especially hard for people of color to navigate available benefits and insurance systems, and resources should he easily understandable and pesonalized.

Source: Adapted from 'Rey', Slide 32, NAC Diverse Caregivers Report, Nov 2021

19.2%

WHICH REPRESENTS APPROXIMATELY THIS MANY AMERICANS OF CAREGIVERS ARE AAPI

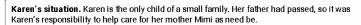
3.0M

About AAPI Caregivers

According to Caregiving in the U.S. 2020, AAPI caregivers are 49.3 years old on average and are typically married or living with a partner. They typically care for a parent or parent in-law who is 69.1 years old with an average of 1.7 conditions, usually a long-term physical condition. Asian Americans and Pacific Islanders (AAPI) are one of the fastest growing ethnic groups in the United States. Like other ethnic groups, cultural values and norms play a strong role in the experience of AsianAmerican and Pacific Islander caregivers

Karen - LGBPTQ Caregiver

Xx



Activities. Karen has a background in finance, so she helped her mother, aunt, and uncle with their finances and facilitated a home health aide service while also figuring out how to have meals delivered and do other small things for her mother.. Karen hired a health aide because she could not care for her mother alone. Karen visited her mother two to three times a week to help with shopping, arrange medications, and take her to the doctor. r

Challenges: The administration of the nursing home was uncommunicative and did not provide updates on what was happening in regard to the pandemic or how Mimi was doing. Karen was not able to FaceTime her mother until May and could not have an outside visit with her until August. Additionally, Karen was concerned Mimi was not getting proper care, since services had been temporarily halted and she knew her mom was sitting in her room all day.

Potential solutions. From a policy standpoint, Karen believes there needs to be more communication with the public, especially after what she experienced with Mimi's nursing home. There needs to be more planning and support around long-term care and the finances required for long-term care. Karen finds it rewarding that caregiving has shown her how strong she is, and the extent of her patience and resourcefulness, but she acknowledges that caregiving is tiring and stressful. Caregivers need support.

Source: Adapted from 'Karen', Slide 37, NAC Diverse Caregivers Report, Nov 2021



WHICH REPRESENTS APPROXIMATELY THIS MANY AMERICANS

OF CAREGIVERS ARE LGBTQ

3.0M

About LGBTQ Caregivers

LGBTQ caregivers are, •n average, 42.4 years •ld, significantly y•unger than n•n-LGBTQ+ caregivers

whe are, on average, 59 years eld. About 42 percent of LGBTQ caregivers are married or partnered, significantly lower than non-LGBTQ caregivers (63 percent). An estimated 59 percent of LGBTQ caregivers are Non-Hispanic White, 21 percent are African American, 13 percent are Hispanic, 3 percent are Asian American and Pacific I slander, and 5

The average care recipient of an LGBTQ caregiver is 65 years old; the

average care recipient of a non-LGBTQ caregivers usually care for a parent (40 percent).

Ter a parent (44) percently, grandparent (16 percent), er a speuse/parther (15 percent), LGBTQ caregivers are mere likely te care fer a grandparent than nen-LGBTQ caregivers (16 percent) s 2

PERSONA DESCRIPTIONS (US DATA)

Debbie (43), Houston, TX Nearby caregiver

Whatever will happen next?



Career	●ffice manager
Care recipient	Mother - Elizabeth (72)
Diseases	Signs of early Alzheimer's
Living situation	Lives 15 minutes drive away
Support	No professional help
Context	Married with two school age children, boy and girl. Works out and eats healthy when she can. Boss unaware of her caregiving responsibilities.
Core Challenges	Managing needs of children and mother. Understanding what to expect in the future. Financial concerns. Being productive at work. Self care

How	How they would engage with a new solution:		
Goals	s & expectations		
? ? ? ?	Wants to have a clearer understanding of Alzheimer's, what to expect, and how best to support mother Wants to consult to mother's PCP and specialized physician Have regular updates of all care recipients to make sure they're alright without having to travel/stretch herself Wishes caregiving was more affordable and less stressful Wants someone to accompany mother to doc when unable to herself		
How 2	they would find out about it: Google, word of mouth, Facebook		
What 2 2 2 2	t resources would they use most: Alzheimer's safety checklist, disease progression plan Comm hub w/ stakeholders for children's and mother's care Tech/ app to integrate to daily life Caregiving expenses reimbursement service Transportation accompaniment service		

Peter (45), Milwaukee, WI Distant caregiver

" I just hope Dad will be OK"



Career	Works in city administration, full time
Care recipient	Father, Ron (80) - Chicago, IL
Diseases	Parkinson's
Living situation	Lives a two hour drive away
Support	Home Instead care, 15 hours per week
Context	●nly child. Mother passed away last year. His father lives alone in the house he grew up in
Core chall enges	Understanding what's happening from a distance. Paying for care now and planning for the future. Guilt and shame for not being more present. Navigating the care landscape. Communicating with doctors

How they would engage with a new solution:

Goals & expectations

- $\ensuremath{\mbox{\fontfamily{100}{1}}}$ Wishes to have a way to be more involved in care, maintain connection w/ dad without having to travel
- ☑ Wants to have someone that they can ask questions
- Wishes for a clearer understanding of father's disease progression and how to prepare for it
- Wishes for more affordable care

What resources would they use most:

Google, word of mouth, facebook, Home Instead partnership

What resources would they use most:

- $\ensuremath{\mathbb{Z}}$ Remote control of administrative tasks related to caregiving finance, legal, appointment scheduling
- Care navigation support/consultant
- Daily video check-in w/ dad and remote monitoring
- Tech / app to integrate to daily life
- Care cost reimbursement service

PERSONA DESCRIPTIONS (USDATA)

Mary (67), Louisville, KY Co-residing caregiver

"There's so much to manage"



Career	Retired school teacher
Care recipient	Husband - Bill (74)
Diseases	Bile duct cancer
Living situation	Living together
Support	Two sons, remote
Context	Spends a lot of time in doctors appointments and managing medications and chemo. Keeps track of medicines.
Core challenges	Financial worries, having recently retired. Wants to learn more about cancer but unsure. Confused by tech and has trouble getting online. Struggles to keep track of pills, scripts, appointments. Struggles to make time for herself. Learning about govt services and supports

Goals & expectations Wishes to have someone on-site or remote helping with pills, scripts, appointments, and other caregiving activities Wishes caregiving was more affordable and less timeconsuming Wants to learn about cancer and what to expect Wants help regularly accompanying husband to hospital How they would find out about it Physician, word of mouth, sons seeing info on Facebook What resources would they use most: Caregiving expenses reimbursement serviceConnection service to in person daytime caregiver Remote control of administrative tasks related to caregiving - finance, legal, appointment scheduling Hospital accompaniment service (covt)

Health Equity

The U.S. Office of Disease Prevention and Health Promotion's report <u>Healthy</u> <u>People 2020</u> highlights the need to address the social determinants of health by identifying as one of its four overarching goals for the decade the need to "create social and physical environments that promote good health for all."

This emphasis is shared by other U.S. health initiatives, such as the National Partnership for Action to End Health Disparities and the National Prevention and Health Promotion Strategy. The World Health Organization also published a report in 2008 titled *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health.* Tragically, the gap remains.

The *Healthy People 2020* report identifies ways to create social and physical environments that promote good health for all. All Americans deserve an equal opportunity to make the choices that lead to good health. But that requires advances not just in health care but also in fields such as education, childcare, housing, business, law, media, community planning, transportation, and agriculture.

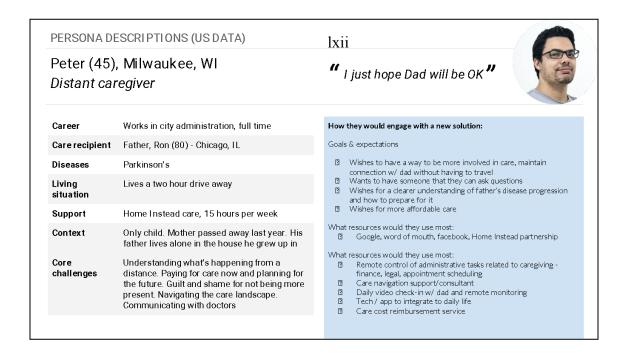
Making these advances requires us to work together to:

- Explore how programs, practices, and policies in these areas affect the health of individuals, families, and communities.
- Establish common goals, complementary roles, and ongoing constructive relationships between the health sector and these areas.
- Maximize opportunities for collaboration among federal, state, and local partners related to social determinants of health.

References and Resources on Health Equity

- Indiana State <u>Health Equity Statement</u>
- CDC, "What is Health Equity?"
- KFF, "Disparities in Health and Health Care: 5 Key Questions and Answers"
- Stanford University School of Medicine, <u>Diversity at Stanford Medicine</u>
- ODPHP, <u>Healthy People 2020</u>
- Administration for Community Living, No Wrong Door System

How a Care Connector Can Support Different Types of Caregivers

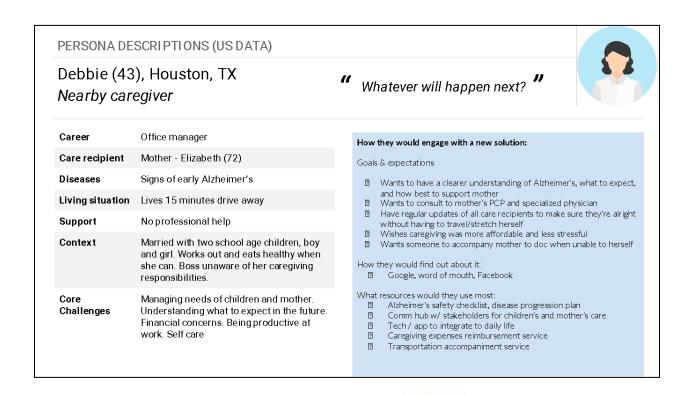




Peter's needs are met by several different types of organizations and solution providers:

- **1. Connection:** Peter needs help coordinating his father's care while he is distant. **Wellthy** provides care navigators to assist with this, and it has apps that will help him stay informed about his father's changing needs.
- **2. Information:** He wants to learn more about the disease progression. **Caregiving.com** can curate info on Parkinson's from many different sources, including NIA/NIH, the Parkinson's Association, Mayo Clinic, and multiple websites.

3. Financial Support: Peter doesn't know which services can be paid for by his employer benefits, and which by his father's Medicare or supplemental insurance benefits. **Givers** does this full analysis for him and facilitates reimbursements.



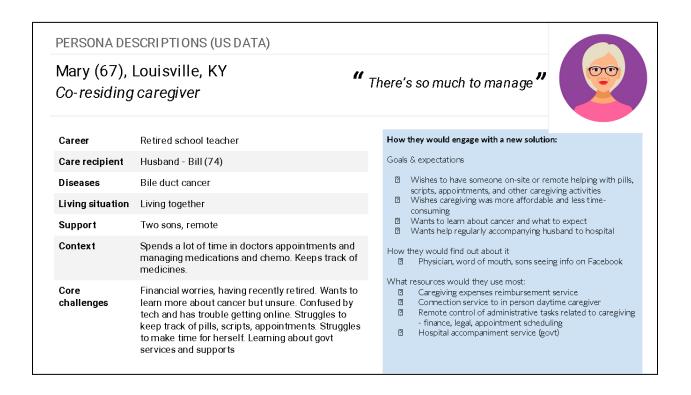


As a caregiver, Debbie has the following needs:

1. Information: Debbie wants to know what to expect. The Care Connector would provide information on the care journey for a family member with Alzheimer's, curated from multiple

sources, including AARP Caregiver Resources, the NIA, Alzheimer's Association, and Aging Well Hub's Caregiver Journey for phases 1 to 6.

- **2. Support Services:** Debbie needs the assistance of care providers. **Family Caregiver Alliance** and **Cariloop** could help her find those, which are available to her without cost.
- **3.** Caregiver Support: Debbie feels isolated and overwhelmed by caring for both her children and mother. Daughterhood offers supportive Circles in many communities throughout the U.S.











Mary has the following needs:

- **1. Caregiver Navigation and Support:** Mary needs help with medication management, medical appointments, and navigation. **The Helper Bees** offers these types of support and can identify appropriate providers. **Primary Record** can also help in gathering all the medical information and types of medication her husband needs and keeping it updated as things change.
- **2. Information:** The Care Connector will provide curated information from multiple sources on bile duct cancer, its progression, and the patient's changing needs.
- **3. Advanced Care Planning:** Mary and her husband need to complete an advance care directive and make decisions about his care plan. **Cake** has all the information needed for this part of the Care Journey and provides a comprehensive range of services.

Parting Thoughts From the Executive Roundtable

"Family caregivers are interfacing with a fundamentally broken and disintegrated governmental system that is central to the financing of a lot of the care delivery."

"It's hard to sell things to families, when every family is literally creating an entire delivery system, all by themselves, over and over again."

"There's a huge gap in how you find a caregiver; there is no direct path. Identifying who the caregivers are feels like a big barrier for all of us in this space."

"We need to show significant cost savings the way pharmaceuticals need to show drug efficacy."

"What's the right way to communicate to the market? Family caregivers are not really a category. It's not like you can go to college students or new moms; family caregivers are cross-cutting from a demographic perspective."

"We don't think we can get consumers to pay for this directly. And trying is really detrimental to the product."

"The thing that's going to either drive us crazy or forward is willingness of those that own the risk to mainstream the family caregiver as part of care planning."