LANDSCAPE OF CAREGIVING INNOVATIONS
Bringing Together Caregivers, Innovators, Services, and Solutions

Susan W. Golden, Sc.D.
& dciX Caregiving Innovations Project
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Pivotal Ventures is an investment and incubation company created by Melinda French Gates to advance social progress in the United States. We believe that removing the barriers that hold people back improves life for all. Pivotal Ventures supports a range of partners that are advancing new ideas to help aging Americans, their families, and caregivers.

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

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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 unprecedented impact of Covid-19 on caregiving, the need to recognize and support family caregivers as the cornerstone of society has become even more important. 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 AARP and the National Alliance for Caregiving, in 2020 there were nearly 48 million unpaid caregivers in the United States, a number that swelled further during the pandemic.[1]
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 companies; 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 Appendix 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 United States 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 US, 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 UNPAID CAREGIVER JOURNEY, PAIN POINTS AND CHALLENGES

“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 compounds the caregiver’s Information Journey. 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 of care. 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 varied services and how to integrate and manage the older adult’s health directives and wishes.

   • Identifying who will pay for the services, products, equipment, food, and supplies provided.
3. Caregiver 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, often with significant impacts on the health, wealth, and social networks of the caregiver. 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 caregivers can sustain their own physical and mental health and financial stability. 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, Honor Expert, 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 Appendix 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**

An important component of the Information Journey are the many types of caregiving needs that an unpaid caregiver either coordinates, provides, or hires professionals to provide. These include activities of daily living, health and safety, care coordination, transportation (e.g., doctor visits), transition support, running errands, planning meals, food preparation, managing the finances and health insurance, and even providing medical care as telehealth has brought care delivery into the home.

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.
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, listed in the Appendix.

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 Appendix 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

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 Appendix.)
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 some innovators have faced, we conducted three initiatives: Data Gathering; Identification and Analysis of Challenges and Barriers that innovators encounter; and a Convening of Caregiving Innovators to garner their perspectives.

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.

Analysis and Identification 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

- **Aloe Care Health**
  - Description: We believe that technology can do a better job of keeping older adults safe and connected to their caregivers. And when it does, humans are empowered to make a better quality of life possible.
  - URL: https://get.aloe-care.com/
  - Start Up Stage: Early

- **Carallel**
  - Description: Carallel offers a caregiver support solution that combines digital tools with personal guidance from senior care experts.
  - URL: https://carallel.com/
  - Start Up Stage: Early

- **Care.com**
  - Description: Helps families find child care, senior care, special needs care, tutoring, pet care, housekeeping, etc.
  - URL: https://www.care.com/
  - Start Up Stage: Early

- **Care3**
  - Description: Care3 is a HIPAA-compliant mobile communications and tracking platform for people impacted by the social determinants of health and the provider.
  - URL: https://www.care3.com/
  - Start Up Stage: Early

- **CareAngel**
  - Description: CareAngel is caregiving reinvented. ANGELS is an Automated, Intelligent, Monitoring & Caregiving platform. A family's virtual caregiving assistant.
  - URL: https://www.careangel.com/
  - Start Up Stage: Early

- **CareApp**
  - Description: CareApp provides a measuring window into the care and well-being of your loved one by placing seniors and families at the heart of an organization's service.
  - URL: https://www.careapp.com/au
  - Start Up Stage: Early

- **CareLinx**
  - Description: CareLinx is a nationwide network of home care professionals that includes all levels of caregivers for all service types.
  - URL: https://www.carelinx.com/
  - Locations: San Francisco
  - Start Up Stage: Early

- **Carely**
  - Description: Carely supports and improves the care experience by simplifying communication and facilitating engagement for the patient and their caregivers.
  - URL: https://www.carelyapp.com/
  - Locations: Detroit
  - Start Up Stage: Early

- **Cerest Health**
  - Description: Cerest Health provide the best possible care for a loved one who relies on you, as a family caregiver.
  - URL: https://www.cerest.com/
  - Locations: Cincinnati
  - Start Up Stage: Early

- **Cera**
  - Description: Cera is a technology company transforming social care. We use smart technology to connect elderly people with experienced caregivers to provide..."}

- **Daughterhood**
  - Description: Daughterhood's mission is to support and build confidence in women who are managing their parents' care. The daughterhood blog, website and social..."
  - URL: https://www.daughterhood.org/
  - Locations: Washington, DC
  - Start Up Stage: Early

- **Dispatch Health**
  - Description: DispatchHealth is a provider of mobile and virtual health care for people of all ages in the comfort of their own home. It offers on-demand healthcare for people..."
  - URL: https://www.dispatchhealth.com/
  - Locations: Denver
  - Start Up Stage: Early
Embodied Labs
Description: Embodied Labs is an immersive training platform that improves outcomes in training, awareness, and family and caregiver support. The company's goal is to help caregivers feel better equipped to care for their loved ones.
URL: https://embodiedlabs.com/
Locations: Los Angeles
Start-up stage: Early (pre-Series A)

Homage
Description: Homage is a complete solution that combines technology and the best care professionals to enable seniors to age at home with dignity.
URL: https://www.homage.com/
Locations: San Francisco
Start-up stage: Growth (post-Series A)

Homethrive
Description: Homethrive is a family elder care coordinator that reduces the work, worry, and stress on employee family caregivers who support aging loved ones living at ... (text continues)
URL: https://www.homethrive.com/
Locations: ...
Start-up stage: Series A

Honor
Description: Honor is a home-care technology company that partners with local agencies to provide reliable, high-quality in-home care. The company provides ...
URL: https://hkonhonor.com
Locations: San Francisco
Start-up stage: Growth (post-Series A)

Kinto
Description: Kinto is here to help you care better. Caregivers with Kinto are given the support they need through a suite of useful digital tools and access to a community.
URL: https://www.kinto.care
Locations: Contributing
Start-up stage: Series A

Lifted
Description: Lifted only accept the best Caregivers. They make Caregivers with innovative technology so they can focus on delivering excellent care. Lifted provides exceptional care! ...
URL: https://www.lifedcore.com/
Locations: Contributing
Start-up stage: Early (pre-Series A)

Papa
Description: Papa connects College Students to Older Adults who need assistance with transportation, house chores, technology lessons, companionship, and other needs.
URL: https://www.papa.com
Locations: Miami
Start-up stage: Growth (post-Series A)

Roobrik
Description: Roobrik provides online tools to help aging adults and their families make more informed and empowered health and care decisions with clarity and confidence.
URL: http://roobrik.com/
Locations: Durham
Start-up stage: Growth (post-Series A)

SeniorLink
Description: Seniorlink provides services, support and technology that engage family caregivers.
URL: https://www.seniorlink.com/
Locations: Boston
Start-up stage: Growth (post-Series A)

Tcare
Description: Tcare's Medicaid-approved, SaaS platform reduces caregiver burnout and delays nursing home placement. TCARE's evidence-based productivity technology ...
URL: https://www.tcaretonline.com/
Locations: Contributing
Start-up stage: Early (pre-Series A)

Tending
Description: Tending is a convenient, easy-to-use, one-stop-shop for family caregivers, supporting and caring for loved ones.
URL: https://www.starttending.com/
Locations: San Francisco
Start-up stage: Early (pre-Series A)

The Helper Bees
Description: The Helper Bees is an innovator that successfully improves the home care experience for the patients and caregivers. They work with some of the ...
URL: https://www.thehelperbees.com/
Locations: London
Start-up stage: Series A

Torchlight
Description: Top U.S. companies use Torchlight's digital platform and expert advisors to educate and empower employees to resolve modern caregiving challenges ...
URL: https://www.torchlight.com/about-emp...
Locations: Boston
Start-up stage: Growth (post-Series A)

True Link
Description: True Link protects seniors from becoming victims of fraud, identity theft, and scams by providing financial tools for older adults and their families.
URL: https://www.truelinkfinancial.com/
Locations: San Francisco
Start-up stage: Growth (post-Series A)
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 Appendix.

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.

“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.”

“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 self-identify 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 customer-acquisition 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, as with, e.g., college students or new moms.
- 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 to fund social support infrastructure for caregiving. Part II of the report considers a blueprint for this type of framework.
SECTION IV
MARKET MAPPING OF 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: Understanding 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:

- 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
- Financial Caregiving
- Fitness
- Fall Prevention, Detection, Mobility
- Health and Safety Awareness
- Insurance, Medicare, Medicaid
- Isolation, Loneliness
- Life Companions
- Life Enrichment and Empowerment
- Medication Management
- Personal Safety Monitoring
- Reimbursement Navigation
- Sensory Aids
- Social Well-Being
- Tech-Enabled Home Care
- Telehealth for Older Adults
- Transportation
- Wearables

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 Appendix.
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:
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.

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, an investment and incubation firm founded by Melinda French Gates, the Accelerator’s program themes for the upcoming 2022-2023 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 solutions, 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 older adults 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 Appendix:
Challenge 3: Understanding the Caregiving 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 for the service or product is similarly not always the care recipient or caregiver. Understanding the characteristics of the payor as well as the end user of a product or service is essential both in developing an effective business strategy for innovations and in meeting the needs of older care recipients and their caregivers. It involves services purchased directly by the care recipient, services purchased on behalf of the care 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.
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.

Practical Implications for the Reimbursement Process: There is growing demand for the adoption of promising value-based payment approaches in Medicare and Medicaid that enhance accountability for healthcare cost, quality, and equity. Part of the impetus to accelerate the adoption 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.

Employers and 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.

The Family Caregiver and Care Recipient: While they are the most obvious customers for products and services, family caregivers are 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 challenges is critical to the success of 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 offering.

• 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.
LANDSCAPE OF CAREGIVING INNOVATIONS: PART II

SOLUTIONS LANDSCAPE
SECTION V
MOVING FORWARD: THE FUTURE OF CAREGIVING SOLUTIONS

“There are four kinds of people in the world: Those who have been caregivers, who are caregivers, who will be caregivers, and those who will need caregivers.”

-- Former First Lady 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 millions 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 and ecosystem.
The Business Opportunity and Public-Private Partnerships

“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 the total investment that year in elder care companies was estimated to be $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

*Data as of June 3, 2021 from Crunchbase News

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Invested</th>
<th>Number of Deals</th>
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<tbody>
<tr>
<td>2016</td>
<td>$334M</td>
<td>67</td>
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<td>2019</td>
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<tr>
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</tr>
<tr>
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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 includes the venture funds associated with major caregiving-related investments in the past 10 years.

While some venture 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 these opportunities, 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 invest because they are unsure of exit strategies for these types of investments. To date, there have only been 12 exits in this market:

<table>
<thead>
<tr>
<th>Company</th>
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<th>Year</th>
<th>Valuation</th>
<th>Transaction</th>
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<tr>
<td>Home Instead</td>
<td>Honor Technology</td>
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<td>Current Health</td>
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<td>2021</td>
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<td>InnovAge</td>
<td>Apax Partners</td>
<td>2020</td>
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<td>True Link</td>
<td>Khosla Ventures</td>
<td>2020</td>
<td>$135 million</td>
<td>Series B</td>
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<td>Ingenics</td>
<td>Almost Family</td>
<td>2019</td>
<td>$13.4 million</td>
<td>Acquisition</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Care.com</td>
<td>IAC</td>
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<td></td>
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<td>$500 million</td>
<td>Acquisition</td>
</tr>
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<td>Incenter (Finance of America)</td>
<td>2018</td>
<td>Undisclosed</td>
<td>Acquisition</td>
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<td>Great Call</td>
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<td>2017</td>
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<td>Generali Global Assistance</td>
<td>2015</td>
<td>Undisclosed</td>
<td>Acquisition</td>
</tr>
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<td>Living Independently Group</td>
<td>GE Healthcare</td>
<td>2009</td>
<td>Undisclosed</td>
<td>Acquisition</td>
</tr>
<tr>
<td>SilverSneakers</td>
<td>Tivity Health</td>
<td>2006</td>
<td>$450 million</td>
<td>Acquisition</td>
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</tbody>
</table>
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 of successful solutions, and identification of new needs and changing innovation gaps.

The Stakeholders

The stakeholders also include a diverse set of players: the actual providers and coordinators of care, both paid and unpaid; the recipients of that care; the family members who may be influencers or the actual decision-makers or purchasers of the product and services; the healthcare providers; and the payors for those services, including insurance, employers, Medicare, Medicaid, and Medicare Advantage plans, and caregivers themselves. It will be essential to have all stakeholders involved in supporting the development of a comprehensive, integrated, infrastructure for caregivers.

Health equity will be considered by stakeholders at all levels and 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 with various Stakeholders:

Caregiver Needs and Experience

• Not all are digitally literate; a mechanism is needed to support them
• Many information resources and solutions that they are not aware of
• Will want a human care navigator to assist them at some point
• Consideration for those who do not speak English
• Not all can afford the products and services needed
• Privacy and HIPPA compliance is essential for data collection
• The most expensive feature is human care navigation
• Must be user-friendly
• Developing awareness to use resources is costly
• Not all are fluent in English or have adequate health literacy to engage in the connection process without personal assistance.

*Needs to be inclusive, comprehensive, human touch, trusted, personalized, dynamic and interactive*

**Partner Services Perspective and Business Models:**

• For every lead conversion to a paying customer, provide services for free to a caregiver
• If an ad tech model is used, it will require volume and scale
• Collect data on employer, health plans, or other group payor of caregivers as an alternative lead generator
• Education of caregiver is needed; they may have an employer benefit
• Need a broader awareness campaign, e.g., “Plan for Care”
• Need to understand and integrate different state and national funding mechanisms

*Win-win business models are needed; support the providers with lead generation, insights and data, 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 the Care Connector via the digital “back door” – i.e., being linked from a prior search?
• How to assess personalized care needs and the demand for human care navigators and coaches?
• How to create a feedback loop to modify the care hub products?
• How to assess satisfaction from partner organizations and companies?
Policy Innovations and Initiatives

Action at the federal level is 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. 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 availability and sufficient supply of a paid workforce of caregivers, with adequate training, will continue to be an important policy imperative. Melinda French Gates has eloquently advocated for a “caregiving czar” and the importance of paid family leave.

While legislative initiatives early in the Biden administration stalled, the caregiving innovation community recommends 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 caregivers 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 if and when they need assistance. In 2019, legislation in Washington state created a new payroll assessment to fund a first-in-the-nation program to provide financial assistance for long-term care. The legislation, H.B. 1087, establishes a new 0.58% tax on employee wages beginning in January 2022 to fund long-term care assistance. 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 population. California recently released its Master Plan for Aging: Five Bold Goals for 2030:

1. **Housing for All Ages and Stages**: We will live where we choose as we age in communities that are age-, disability-, and dementia-friendly 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.

Anne Tumlinson, founder of Daughterhood and leader of the ATI Advisory, advocates for how to pay for care and identifies policy solutions that will be critically important to each family. ATI has worked to outline how to advance non-medical supplemental benefits through Medicare Advantage.

In September 2022, several key reports were released that all echoed the need for policies and funding to support the infrastructure for caregivers in the US. The RAISE Family Caregiver Advisory Council (RAISE Council) issued the 2022 National Strategy to Support Family Caregivers. Both the SCAN and the John A Hartford Foundation with the Convergence Center for Policy Resolution released Reimagining Care for Older Adults. Nexus Insights released their work, 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 solutions that can have an impact on the challenges facing our healthcare and care systems in this country. Importantly, the Rosalynn Carter Institute for Caregivers has called for a plan to establish an Office of Caregiver Health within the Office of the Secretary of HHS. This could help to ensure that the voices of family caregivers continue to be heard in future polices and legislation, and implementation of recommendations.
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 challenges, and educating the public about the value of tending to the unmet needs of family caregivers. These opportunity areas are included in the Appendix as well.

The Care Connector platform and hub 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 their 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.
SECTION VI
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 particularly fragmented and haphazard. The country’s complex healthcare system exacerbates the difficulties families face in finding 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 the multitude of products and services and information they seek. Instead, family caregivers often rely on word of mouth to find the products and services they need for a dependent adult, 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 caregivers and their care recipients identify services, products, and solutions to support 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 caregiving 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?

These variables create 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 caregiving infrastructure that could be freely accessed by all consumers, caregivers, and care recipients.

We propose that this infrastructure take the form of a Care Connector, a one-stop platform or hub 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 navigating the complexities of care and reimbursement. Similarly, innovators and solution providers could use the Care Connector for their needs: to reach individuals and their families who would benefit from their products and services, to connect with potential clinical and strategic collaborators who could 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 help spur further innovation and policy 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 platforms and sources of information**: Identification of the myriad “care hubs” and information sources currently available, and how to integrate them into a central marketplace and platform.

- **Curation capabilities**: Information resources that can be accurately matched to the care needs of the older adult.

- **Developing 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 council**: Ultimately, this will enable the Care Connector to serve as a trusted brand for hosting the Care Connector

- **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.
Putting the Pieces of the Puzzle Together

Seven components were identified as essential to any model for a Care Connector 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 caregivers, introducing them to the platform, and help to populate 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 to achieve behavior change – i.e., contacting and utilizing the Care Connector. A PSA 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. The newly launched Move Care Forward initiatives by Pivotal Ventures is 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.

Additional strategies for awareness include referral programs and education series 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.

A question that we will pose to the Advisory Group is whether there is a way to integrate some of the questions and 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 among solutions generated, and engages with partner services. These include both nonprofit organizations and for-profit companies. 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. The services and support are carried out and implemented, and payment mechanisms are identified.
Feedback: Solution partners and recipients provide information and feedback to Care Connector about quality, satisfaction, and any challenges, as a mechanism to improve service and accountability.

The types of information and solutions offered will evolve over time as the needs of the caregiver and care recipient change. This may result in multiple reassessment, matchmaking, and fulfillment cycles. The advantage of being in the Care Connect system is there will be good history and documentation to facilitate a review of new needs.

It is important to collect information about when a “match” does not work out, or doesn’t meet the quality control standards established.

The following diagram illustrates the two-sided marketplace and how feedback would be obtained:

---

**Existing Types of Care Connectors and Care Hubs**

A goal of the Care Connector will be to integrate the many excellent resources that 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.
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: Family Caregiver Alliance, CareNav, Eldercare Locator, US Aging.
- Assisted-living communities and housing alternatives: A Place for Mom, Care Academy, Eldercare Locator, The Nursing Home Resource Center, Seniorly.
- Care navigation services for employers and consumers: Avanlee, Caregiving.com, Carely, Carilooop, Findhelp.org, Helper Bees, Homethrive, Honor Expert, IanaCare, Kunumi, Vital Links, Wellthy.
- End-of-life care and planning: Cake, FreeWill, Iris Plans.

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 financial assessment. 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 Administration on Aging (AoA) 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 Eldercare Locator and US Aging. 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.
• **New York State and National Academy of Medicine** launched an excellent information platform with an interactive map for aging in New York. Created to inform older adults in the New York City area of where they could find resources near where they live, this interactive 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 Appendix 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 available to state and local agencies
• Financial caregiving assessment tools needed
• Matching needs to solutions is missing
• No direct business-to-consumer channels
• Barriers to scaling solutions
• No current infrastructure
• Financial incentives to help caregivers
• Absence of 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 adult unpaid caregivers, yet it has only been able to reach on average 10,000 per year. A Care Connector could help address this gap through a series of awareness campaigns in which an organization like FCA would be among the partners.

**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, with a mechanism to support them. The most expensive component will be having access to human personalized care planning.

**Data and Metric Needs:** What are the nonfinancial metrics of success to be collected? What types of data on quality and satisfaction should be collected? Can we create the Yelp for caregiving products and services? 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 and Marketplace? 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 a complete list of these metrics

- Success metrics
- Revenue metrics
- Engagement metrics
- Growth metrics
- Community-related metrics
Additional insights about caregiver needs and experiences, perspectives from partner services and business models, and data and metrics desired are summarized:

**Business Models for a Care Connector: Perspectives From Future Partner Companies and Organizations**

“The ROI is clear. We believe that 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 – i.e., for every paying caregiver, a service or product would be provided free for someone who could not afford the services of, e.g., Cariloop or Wellthy. For many companies who are public benefit corporations, giving back is an important part of their social impact model.

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 the caregiver.

Anything that encourages an employer or other group payor (health plan, organization) to sign on is attractive to partner companies. Many are enthusiastic about gaining brand recognition in multiple ways. It may facilitate employees inquiring whether their own employer or insurer 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, 43 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 concept would only succeed with the establishment of a broad Advisory Group to serve a number of key roles. Examples include 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., AARP, US Aging/ Eldercare Locator, Family Caregiver Alliance, Rosalynn Carter Institute for Caregivers, Caring Across Generations); solution providers (e.g., Care.com, Caregiving.com, Cariloop, Findhelp.org, Givers, Helper Bees, Home Thrive, Honor Expert, Ianacare, Wellthy); 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 and insurance companies (e.g., Aetna, Blue Cross Blue Shield, Cigna, Anthem, and Venture Capital) and medical societies and providers such as (e.g., American Geriatric societies, the American College of Physicians, and the American Academy of Family Physicians).

During the Fall 2022, we had the opportunity to present the initial framework for the Blueprint for a Care Connector at the Seize the Moment convening sponsored by the Rosalynn Carter Institute for Caregivers to a broad representation of stakeholders. We received a range of feedback to help spur further innovation and work on developing a Care Connector hub. Uniformly, it was acknowledged there is a need for information and data in a centralized resource. There was general agreement that a “rising tide lifts all boats”, consistent with the concepts outlined recently by Stuart Butler and Len Nichols in the American Journal of Public Health: Could Health Plan Co-Opetition Boost Action on SDOH”?

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

APIs: Several companies suggested that they would be interested in helping to sponsor a type of API (Application Programming Interface) which would allow for different applications to “talk to each other” on a Care Connector platform. This would enable a framework for free access to information by caregivers, while simultaneously providing access to solutions.
These applications would integrate with each other allowing for a seamless flow of data across platforms into the care connector, helping to ensure information is accurately represented. This would also allow for all transactional data to be tracked by the Care Connector and the respective partners. An API has the potential to decrease developmental hurdles of the Care Connector if a broad enough range of companies, service providers, etc. in the caregiving space agree to join in the effort as these services may automatically be piped and integrated into the Care Connector, as opposed to being manually added and updated.

Open APIs could become available both on a State-wide basis as well as nationally.

Transparency about Criteria: Transparency about the criteria of who would be able to join the platform, and how to monitor the players and their quality. The importance of a trusted advisory council was reinforced. Ensuring quality and reliability is paramount.

Voice of the Consumer: Here too, the importance of a trusted advisory council that also includes the voice of the consumer was emphasized.

Pilot Initiatives and Evaluation

In designing a blueprint that could be tested and piloted, we encourage forming partnerships with a few states or regions to utilize the 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: California, Georgia, Massachusetts, Michigan, New York, Ohio, and Wisconsin.

Personas and Caregiver Profiles

To evaluate different approaches and components of a Care Connector, it is helpful to consider the many different types of caregiver profiles that reflect the diversity of the 48 million unpaid family caregivers. We are deeply committed to having the care connector support the many different types of caregivers and the range of diversity among family caregivers. Asian Americans are the fastest growing group of “minorities” in the US. Latinos and African Americans have higher rates of dementia and physical illnesses such as diabetes and hypertension, and often more of their caregivers are
unemployed or 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 “test” how the different components of a Care Connector could support their needs.

The Appendix contains a list of nine different personas representing different 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:

**PERSONA DESCRIPTIONS**

**Freida (39), New York, NY**  
*Digital native daughter supporting her mother*

<table>
<thead>
<tr>
<th>Career</th>
<th>Financial analyst for Prudential, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care recipient</td>
<td>Mother (75). Recent hip replacement. Underwent rehab in a local facility, now being transferred to her own home. Daughter moving in with mom.</td>
</tr>
<tr>
<td>Traits</td>
<td>Assertive, compassionate, protective, tech savvy</td>
</tr>
<tr>
<td>Context</td>
<td>Older daughter - has a younger brother, who lives down the road from their mother.</td>
</tr>
<tr>
<td>Financial / insurance</td>
<td>Both Frieda and her mother are middle income. Frieda has health insurance via Prudential</td>
</tr>
<tr>
<td>Core Challenges</td>
<td>Inexperienced with care. Work conflict concerns, cannot always be at home. Unsure what care equipment is needed, what the care set up should be at home. Wants to hire extra help but don’t know where to start.</td>
</tr>
</tbody>
</table>

*Note: Profile info drawn from: CoCare*
PERSONA DESCRIPTIONS

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

“There’s so much to manage”

<table>
<thead>
<tr>
<th>Career</th>
<th>Retired school teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care recipient</td>
<td>Husband - Bill (74)</td>
</tr>
<tr>
<td>Diseases</td>
<td>Bile duct cancer</td>
</tr>
<tr>
<td>Living situation</td>
<td>Living together</td>
</tr>
<tr>
<td>Support</td>
<td>Two sons, remote</td>
</tr>
<tr>
<td>Context</td>
<td>Spends a lot of time in doctors appointments and managing medications and chemo. Keeps track of medicines.</td>
</tr>
<tr>
<td>Core challenges</td>
<td>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 gov’t services and supports</td>
</tr>
</tbody>
</table>

**How they would engage with a new solution:**

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 time-consuming
- 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 service
- Connection service to in person daytime caregiver
- Remote control of administrative tasks related to caregiving
  - Finance, legal, appointment scheduling
- Hospital accompaniment service (gov’t)


The Appendix also contains examples of innovator profiles and nonprofit organizations who would be invited to participate in the Care Connector and be part of the marketplace of solution providers.
Designing a Caregiving Innovations Marketplace...
Additional Opportunities for a Care Connector

Another pain point identified by companies thus far is their need to find clinical partners to test their products and services. Innovators will also need access to clinical partnerships and opportunities to evaluate their products for impact metrics and product market fit. It could be worthwhile to create a database of hospitals, health plans, and community organizations interested in serving as avenues for such research and evaluation. A caregiving innovations marketplace could provide access for startups for that as well.

There are also a number of community groups of older adults who are interested in helping to evaluate new products and services that they may benefit from, but few entrepreneurs are aware of them. The Longevity Explorers, Avenidas Lab, and the MIT Agelab: Lifestyle Leaders are specific communities of older adults willing to “try” and provide feedback on new products and services. Brookdale Senior Living has an entrepreneur-in-residence program. Community-based organizations, such as Y’s and other local networks through the Village Movement, can serve as focus groups for user feedback and iteration.

Therefore, another component of a caregiving innovations marketplace would be the capability to identify innovation 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 solutions development teams, helping to establish product market fit.
Conclusion

The Stanford dciX Caregiving Innovations Project set out to define the questions and explore topics conducive to developing a caregiving blueprint for others to use and build upon. Our goal is to catalyze fresh thinking and to 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 will allow millions of American families to give and receive care with dignity and love.

Acknowledgements

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