

# **WHITEPAPER**

# How Technology-Enabled Family Caregiving Lowers Hospital Admission Rates





Family caregiving--when a qualified family member or friend cares for a loved one at home--is the preferred choice for most seniors and people with disabilities. This population feels more comfortable with the familiarity and loving support of family caregiving compared to institutionalized settings and traditional home care.

Most states have some form of a Medicaid-funded paid family caregiver model in place, but does family caregiving translate into measurably reduced medical costs?

This whitepaper will examine the repercussions of high hospital admission rates and offer an

analysis of the benefits of family caregiving for senior patients, with a focus on reduced hospital admission rates. It will then present how FreedomCare's technology-enabled approach to family caregiving is particularly effective at reducing hospitalization rates and keeping readmission rates low.

- I. The Escalating Problem of Hospital Admissions
  Among Seniors
- II. Benefits of the Family Caregiving Model in terms of Hospital Admission Rates
- III. The Evolving Role of Technology-Enabled Family
  Caregiving in Reducing Admissions

# I. The Escalating Problem of Hospital **Admissions Among Seniors**

According to a MedPAC analysis of 2017 Centers for Medicaid and Medicare (CMS) claims data, 15.7% of hospitalized seniors were readmitted within one month of discharge.<sup>1</sup> Many of the readmissions were avoidable.<sup>2</sup>

In addition, a University of Michigan study of 318,000 seniors found 2.5% of senior patients who were hospitalized with an infection and discharged were readmitted with the same infection within 30 days. The percentage is small but should be closer to zero for treatable and preventable conditions.3

Readmitting patients is costly. The costs for hospitals is estimated to be roughly \$26 billion annually, according to a 2015 report.<sup>4</sup> Readmission to the hospital has drawbacks for patients, too. Readmitted senior patients are at increased risk for infections, medical errors, and an overall decrease in functioning.5

## In 2017, 15.7% of hospitalized seniors were readmitted within one month of discharge.

CMS's Hospital Value-Based Purchasing Program is focused on quality of care to reduce avoidable patient readmissions to hospitals.6 The Affordable Care Act sought to reduce preventable readmissions and included the Hospital Readmissions Reduction Program (HRRP).

To discourage readmissions, the CMS HRRP program financially penalizes hospitals that have high senior patient readmission rates.7 Almost half of US hospitals received lower Medicare payments because of excessive readmissions that occurred between 2016 and 2019.8

Another way the HRRP aims to reduce preventable readmissions is by encouraging improved communication between hospitals, caregivers, and patients regarding discharge plans. When hospitals plan for post-hospital care with the patient and caregiver, it helps coordinate and streamline necessary services before the patient is released.

Patient and caregiver education can prevent readmissions by reducing the chance of misunderstandings of the post-hospital discharge plans, but research shows fewer readmissions occur when multiple transition components, such as patient education and engaging social and community supports, are employed together.9

Under the Caregiver Advise, Record, and Enable (CARE) Act, first implemented in 2014, family caregivers must now be included in a hospital's discharge procedure. Family caregivers need to receive all information, including wound care, medication management, and protocol for safe transfers, necessary to care for the discharged patient at home.10

Research suggests that the family caregiving model could help reduce hospital admissions, lowering costs and providing improved care to senior patients.

Stensland, J. (2019, September 5). MedPAC evaluation of Medicare's Hospital Readmission Reduction Program: Update [PowerPoint slides]. http://medpac.gov/. http://medpac.gov/docs/default-source/ default-document-library/sept-readmissions-presentation-final.pdf?sfvrsn=0

<sup>2.</sup> Centers for Medicare & Medicaid Services Office of Minority Health's Mapping Medicare Disparities (MMD) Tool
3. University of Michigan. (2019, October 23). Too many older adults readmitted to hospitals with same infections they took home. ScienceDaily. Retrieved August 3, 2021 from www.sciencedaily.com/releases/2019/10/191023150339.htm

<sup>4.</sup> Center for Health Information and Analysis. (2015). Performance of the Massachusetts Health Care System Series: A Focus on Provider Quality, https://www.chiamass.gov/assets/Uploads/A-Focus-on-4. Center for head minimized minimized of the Massachusetts health Care System Series. A Focus on Provider Guality. https://www.chiamass.gov/assets/oploads/A-Focus-on-Provider-Quality-Jan-2015.pdf
5. Felix, H. C., Seaberg, B., Bursac, Z., Thostenson, J., & Stewart, M. K. (2015). Why do patients keep coming back? Results of a readmitted patient survey. Social work in health care, 54(1), 1-15. https://doi.org/10.1080/00981389.2014.966881

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7. Centers for Medicare and Medicaid Services. (2021, August, 6). Hospital Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing
7. Centers for Medicare and Medicaid Services. (2021, August, 6). Hospital Readmissions Reduction Program (HRRP). https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/

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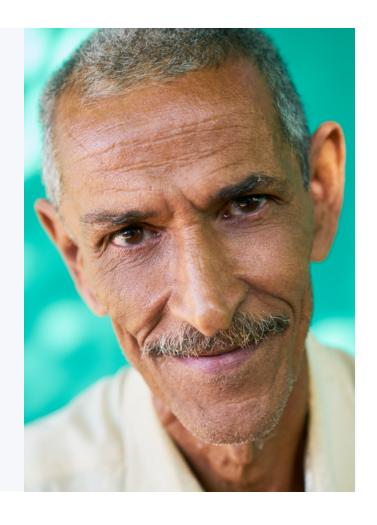
# The Family Caregiving Model

Family caregiving is becoming increasingly popular. In 2013, in terms of Medicaid long-term services and supports, there were more home- and community-based service providers than institutional providers, an 18% increase since 1995.11 From 2015 to 2020, the number of caregivers in the U.S. increased significantly, from 43.5 million to 53 million.12

Self-directed services provide the structure for a patient's selection of a family member or trusted friend as a paid caregiver. A streamlined system reduces fraud and ensures caregivers are paid.

## There are important factors to examine when a senior considers family caregiving:

- Patient's age
- Adequate access to community and medical support
- Prognosis of the patient, including whether the condition is long-term or short-term and whether medical equipment is necessary
- Mobility limitations of either patient or caregiver
- Home environment: space, safety, hazards, and whether they can be modified to meet the patient's needs
- Food preparation and nutrition considerations
- Adequate payment so the caregiver can focus on patient care



org/10.1146/annurev-med-022613-090415

10. Choula, R. B., Reinhard, S. C., Ryan, E., & Young, H. M. (2019). The CARE Act Implementation: Progress and Promise. AARP. https://www.aarp.org/content/dam/aarp/ppi/2019/03/the-care-act-implementation-progress-and-promise.pdf

<sup>9.</sup> Kripalani, S., Theobald, C. N., Anctil, B., & Vasilevskis, E. E. (2014), Reducing hospital readmission rates; current strategies and future directions, Annual review of medicine, 65, 471-485, https://doi.

<sup>11.</sup> Landers, S., Madigan, E., Leff, B., Rosati, R. J., McCann, B. A., Hornbake, R., MacMillan, R., Jones, K., Bowles, K., Dowding, D., Lee, T., Moorhead, T., Rodriguez, S., & Breese, E. (2016). The Future of Home Health Care: A Strategic Framework for Optimizing Value. Home health care management & practice, 28(4), 262-278. https://doi.org/10.1177/1084822316666368 12. AARP and National Alliance for Caregiving. (2020). Caregiving in the United States 2020. https://doi.org/10.26419/ppi.00103.001

# II. Benefits of the Family Caregiving Model in terms of Hospital Admission Rates



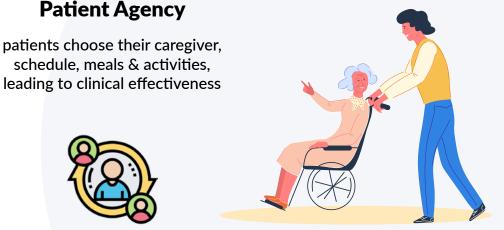
### Focus on Care

family caregivers are compensated, giving them more time and energy to focus on providing quality care



## Safety

patients cared for at home are less likely to be exposed to COVID-19





## **Less Turnover**

**Patient Agency** 

schedule, meals & activities.

leading to clinical effectiveness

turnover is 50% less likely when a caregiver is a family member



## **Cost Savings**

the monthly cost of family caregiving is \$4,000 lower than a semi-private nursing home room



## **Fewer Readmissions**

90-day hospital readmission rates are reduced by 25% when family caregivers are involved in the hospital discharge process

Icons source: https://www.flaticon.com Family caregiving benefits the patient, the family unit, and the patient's health plan. Changes and advances in medicine, expansion of the availability of home care technology, the ease of communication between in-home caregivers and medical professionals, and increased training and support for family caregivers all contribute to successful patient home care outcomes.

#### **Patient Agency**

The overwhelming majority of seniors prefer in-home care to an institutional environment.<sup>13</sup> Family caregiving means the patient can choose who they want to care for them but also the kind of schedules, meals, activities, and other services they experience and engage in.

Patient-centered care, defined as care that is respectful and responsive to patient's preferences, needs, and values, is consistently positively associated with patient safety and clinical effectiveness, <sup>14</sup> and is considered a key component of high-quality health care by the The Institute of Medicine (IOM). <sup>15</sup>

#### **Less Turnover**

Aide turnover is linked to lower quality care and negative health outcomes. Turnover is 50% less likely when a caregiver is a family member, 16 meaning patients are more likely to stay healthy when cared for by family or a trusted friend.

#### Safety

The pandemic underscored the desire of many seniors to receive care at home instead of in nursing homes or other options. Home care was also recognized as the safer option. In New Hampshire, 82% of COVID-19 deaths and 34% of cases were linked to long-term care facilities. There were no COVID-19 deaths and only 1 reported case linked to an in-home services program

serving 87 patients 80 years or older and nursing home eligible.<sup>17</sup> With family caregiving, patients are less likely to be exposed to COVID-19 and family members can remain together and in contact during the pandemic.

#### More Time & Energy to Focus on Care

When family caregivers are not compensated, they may be working another job in addition to caring for their patient. Through Medicaid-funded family caregiving programs, family caregivers are compensated, easing financial burdens and potentially eliminating the need to work another job. When a family caregiver can focus on the care they provide, it increases the quality of care patients receive.

#### **Cost Savings**

The Consumer Directed Personal Assistance Association of New York State (CDPAANYS) highlights that patients with a family caregiver, as opposed to those with no in-home caregiver, have fewer hospital stays, and need fewer medications because preventable health issues are avoided or managed through the caregiver's daily care and attention.<sup>18</sup>

Patients with a family caregiver are also less likely to be institutionalized compared to patients with no in-home care. For the patient's health plan, the monthly cost of family caregiving is lower than a semi-private nursing home room. In 2019, the average monthly cost for a semi-private nursing home room was \$6,175 and the average monthly cost of a family caregiver was \$1,774, yielding a savings per month of \$4,401.

With fewer hospital stays and medications, and by avoiding institutionalization, family caregiving means significant cost savings for a patient's health plan.

<sup>13.</sup> Keenan, T.A. (2010). Home and community preferences of the 45+ population. AARP. http://www.aarp.org/research/topics/community/info-2014/home-community-services-10.html
14. Doyle, C., Lennox, L., & Bell, D. (2013). A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. BMJ Open, 3(1). doi: 10.1136/bmjopen-2012-001570
15. Leavitt, M. (2001). Medscape's response to the Institute of Medicine Report: Crossing the quality chasm: a new health system for the 21st century. MedGenMed: Medscape general medicine, 3(2), 2. https://pubmed.ncbi.nlm.nih.gov/11549951/

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16. Ko, M., Newcomer, R., Bindman, A. B., Kang, T., Hulett, D., & Spetz, J. (2015). California's Medicaid Personal Care Assistants: Characteristics of Family and Non-Family Caregivers. UCSF Health Workforce Research Center on Long-Term Care. https://bealthforce.ucsf.edu/sites/healthforce.ucsf.edu/sites/publication-pdf/Report-Characteristics\_and\_Turnover\_among\_Family\_and\_Non-Family\_Caregivers.pdf
77. Applied Self-Direction. (n.d.). Self-Direction during COVID-19: A New Hampshire Case Study. [Infographic]. www.appliedselfdirection.com. Retrieved August 20, 2021, from https://www.appliedselfdirection.com/resources/self-direction-during-covid-19-new-hampshire-case-study

<sup>17.</sup> Applied Self-Direction. (17.d.). Self-Direction during COVID-19: A New Hampshire Case Study. [Intrographic]. www.appliedself.direction.com. Retrieved August 20, 2021, from https://www.appliedself.direction.com. Retrieved August 20, 2021, from https://www.appliedself.

#### **Reduced Hospital Readmissions**

A 2017 metaanalysis of 15 studies found that when family caregivers were integrated into the hospital discharge process for senior patients, 90-day hospital readmission rates were reduced by 25% and 180-day readmission rates were reduced by 24%.

The authors of the report explain that medical advances, shorter hospital stays, and the expansion of home care technology mean caregivers can take on more complex care responsibilities.

These responsibilities include wound care, managing medications, and operating specialized medical equipment. According to the report: "With proper training and support, caregivers are more likely to be able to fulfill these responsibilities and keep their loved ones from having to return to the hospital."

By including family caregivers in the hospital discharge process for senior patients, 90-day hospital readmission rates reduced by 25% and 180-day readmission rates reduced by 24%.

While integrating family caregivers into the patient discharge process may mean additional efforts on behalf of the hospital, "It is likely to pay dividends through improved patient outcomes and helping providers avoid economic penalties for patient readmissions."<sup>20</sup>

The time expenditure in preparing patient and family caregivers for patient discharge is important for improved long-term health outcomes, and justified by the reduced readmission rates. This is especially true considering preventable patient readmissions cost CMS approximately \$12 billion annually in 2005<sup>21</sup> and may cost closer to \$17 billion today.<sup>22</sup>

The positive outcomes in reducing hospital admission rates are based on family members who are adequately trained, supported, and compensated for their time. The FreedomCare approach to family caregiving leverages digital health practices to ensure caregivers are well-trained, well-resourced, and supported financially and emotionally.



<sup>19.</sup> Murray, K., Edwards-Orr, M., Rich, H., Morris, M, & Ujvari, K. (2019). Paying Family Caregivers to Provide Care during the Pandemic—and Beyond. AARP. https://www.aarp.org/content/dam/aarp/ppi/2021/02/ltss-choices-paying-family-caregivers-to-provide-care-during-the-pandemic-and-beyond.pdf 20. Rodakowski, J., Rocco, P. B., Ortiz, M., Folb, B., Schulz, R., Morton, S. C., Leathers, S.C., Hu, L., & James, A. E., III (2017). Caregiver Integration During Discharge Planning for Older Adults to Reduce Resource Use: A Metaanalysis. Journal of the American Geriatrics Society, 65(8), 1748–1755. https://doi.org/10.1111/jgs.14873 21. Medicare Payment Advisory Commission (MedPAC). (2007). Report to the Congress: Promoting Greater Efficiency in Medicare. http://www.medpac.gov/docs/default-source/reports/Jun07\_EntireReport.pdf

<sup>21.</sup> Medicare Payment Advisory Commission (MedPAC). (2007). Report to the Congress: Promoting Greater Efficiency in Medicare. http://www.medpac.gov/docs/default-source/reports/Jun07\_EntireReport.pd 22. Center for Health Information and Analysis. (2015). Performance of the Massachusetts Health Care System Series: A Focus on Provider Quality. https://www.chiamass.gov/assets/Uploads/A-Focus-on-Provider-Quality-Jan-2015.pdf

# III. The Evolving Role of Technology-Enabled Family Caregiving in Reducing Admissions

FreedomCare's combination of training, technology, and support leads to reduced hospitalization rates compared to the national average for agency-supported home care and family caregiving without FreedomCare. FreedomCare attributes this difference to its technology-enabled approach.

# Hospitalizations and Readmissions with FreedomCare

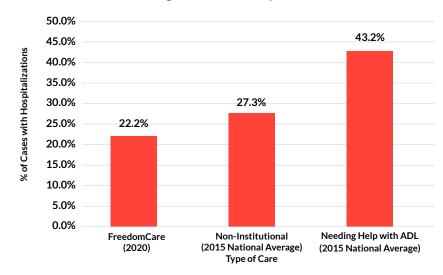
Nationally in 2015, 27.3% of non-institutionalized Medicare beneficiaries with two or more chronic conditions ages 65 and older were hospitalized, compared to only 22.2% of patients ages 65 and older receiving family caregiving with FreedomCare in 2020.

Even more notable, 43.2% of non-institutionalized Medicare beneficiaries receiving caregiving services were hospitalized in 2015, compared to only 22.2% of patients ages 65 and older receiving family caregiving with FreedomCare in 2020.

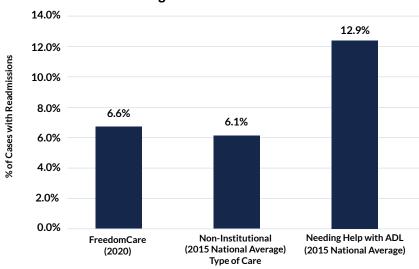
Nationally in 2015, 6.1% of non-institutionalized Medicare beneficiaries with two or more chronic conditions ages 65 and older had hospital readmissions, compared to 6.6% of patients ages 65 and older receiving family caregiving with FreedomCare in 2020.

Additionally, 12.9% of non-institutionalized Medicare beneficiaries receiving caregiving services had readmissions in 2015, compared to only 6.6% of patients ages 65 and older receiving family caregiving with FreedomCare in 2020.

#### Patients Ages 65+ with Hospitalizations



#### Patients Ages 65+ with Readmissions



#### The FreedomCare Approach

Twenty to 25% of unplanned hospital admissions can be prevented through knowledge of risk factors, provider communication, and careful monitoring.<sup>23</sup> FreedomCare is at the forefront of digital health and achieves reduced hospitalizations and low readmissions by providing caregivers with the training, technology, and support needed to deliver quality care to their patients.

#### **Training**

Many family caregivers are not adequately equipped with the tools and knowledge of their patient's health conditions, which can contribute to substandard care and hospital admissions. FreedomCare ensures caregivers receive video-based training specific to their patient's health conditions, so they can provide informed care and feel prepared when health complications arise.

The video-based trainings support deeper knowledge of signs and symptoms, long term complications, medication assistance, prevention, causes, and treatment, all which promote appropriate utilization of provider services. The trainings cover common health conditions and topics like diabetes, heart disease, dementia, chronic pain, urinary tract infections, household safety, and more.

Training videos are delivered directly to the caregiver's mobile device through the FreedomCare app and caregivers' progress is tracked.

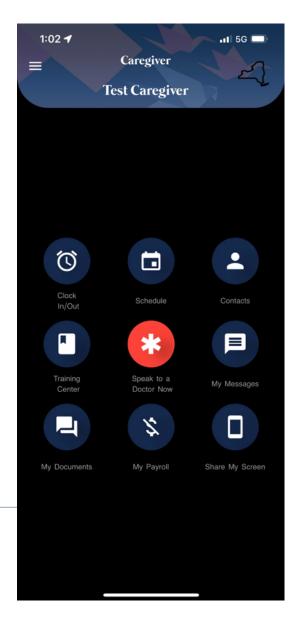
#### **Technology**

Caregivers clock in and out for their shifts using the proprietary FreedomCare app, providing an opportunity for FreedomCare to engage with a captive caregiver audience each day.

Through the app, FreedomCare can track patients' daily vitals and use predictive analytics to identify variations

of concern. When vitals appear unusual, FreedomCare connects the caregiver and patient with a medical provider to prevent any health conditions from arising or worsening.

In addition, caregivers often do not have adequate guidance when they need help with their patient's care. When a health crisis occurs, caregivers default to taking their patient to the hospital. The FreedomCare app features 24/7/365 telehealth access, connecting patients to a licensed medical provider in less than 5 minutes. This service is also available to caregivers to help keep the caregiver healthy and able to consistently care for the patient without disruption. A 2002 study of diabetic patients found a 44% reduction in hospital readmissions when telehealth was employed.<sup>24</sup>



<sup>23.</sup> Ellenbecker, C. H., Samia, L., Cushman, M. J., & Alster, K. (2008), Patient Safety and Quality in Home Health Care. 23. Lienbecker, C. H., Jashins, C., Coshiman, F. S., a Waser, N. (2007). Fathert Safety and Quality in Monte Healthcare Research and Quality (US). https://www.ncbi.nlm.nih.gov/books/NBK2631/ 24. Cherry, J. C., Moffatt, T. P., Rodriguez, C., & Dryden, K. (2002). Diabetes disease management program for an

indigent population empowered by telemedicine technology. Diabetes technology & therapeutics, 4(6), 783–791. https://doi.org/10.1089/152091502321118801 25. Family Caregiver Alliance (2006). Caregiver Assessment: Principles, Guidelines and Strategies for Change. Report from a National Consensus Development Conference (Vol. I), San Francisco; Zarit, S. H. https://www.caregiver.org uploads/legacy/pdfs/v1\_consensus.pdf

The FreedomCare app transforms how caregivers get paid, submit paperwork, and access support. With a few clicks of a button, caregivers can easily clock in and out for their shift, view and update their schedules, access their pay stubs and benefits information, and get reimbursed for their cell phone bill and childcare expenses. They can also connect instantly with their patient's health insurance representative and their FreedomCare coordinator.

One of the most transformative features of the app is InstaPay4Care. This feature allows caregivers to get paid instantly after they clock out of a shift, offering them much-needed control over funds they earn. InstaPay4Care can mean the difference between paying the utility bill on time or having the lights shut off.

#### **Caregiver Support**

Caregiving can be isolating. As a result, caregivers often experience burnout and depression.<sup>25</sup> This can degrade the quality of care patients receive, increasing the likelihood of hospital admissions. FreedomCare uses technology and a caregiver-centered model that ensures caregivers have access to digital resources and feel supported, leading to higher quality care for patients, better health outcomes, fewer hospitalizations, and lower costs.

#### FreedomCare supports caregivers by:

- Connecting them directly to their single point of contact at FreedomCare within 7 seconds
- Connecting them to national helplines, local support groups, and social services for housing, food security, clothing and home items, utility assistance, and financial literacy all via the FreedomCare app
- Making benefits information, like information about no-cost medical insurance and reimbursement programs, easily accessible online and on the FreedomCare app
- Allowing caregivers to get paid instantly after clocking out, giving them more control over funds they earn and easing financial stress
- Maintaining an online caregiver support group for shared understanding and problem-solving
- Sending consistent communications on self-care, caregiving tips, and the caregiver community
- Providing 24/7/365 crisis counseling and immediate connection to a licensed mental health counselor via the FreedomCare app

As family caregiving grows in popularity, FreedomCare serves as the industry leader for using technology and a dedicated team to address medical complications earlier, prevent negative health outcomes, reduce hospital admissions and associated medical costs, and support family caregiver and patient well-being.





As the largest self-directed services agency in New York, we draw on unrivaled experience and an unparalleled case volume. FreedomCare is contracted with almost every insurance plan in New York and trusted by thousands of doctors and medical centers across the state. In addition to New York, FreedomCare operates in Nevada, Missouri, Pennsylvania, and Arizona, and continues to expand its national presence.