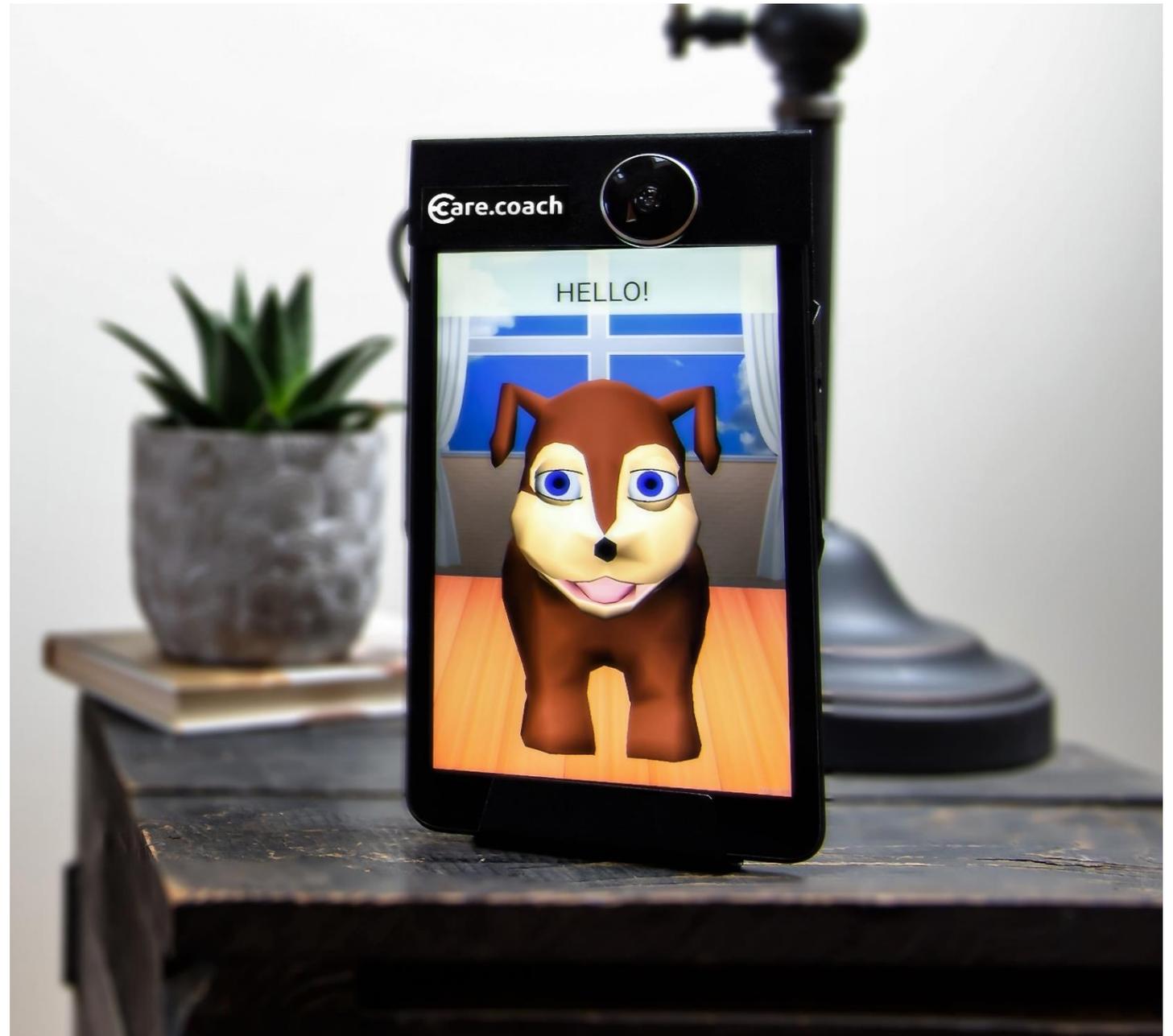


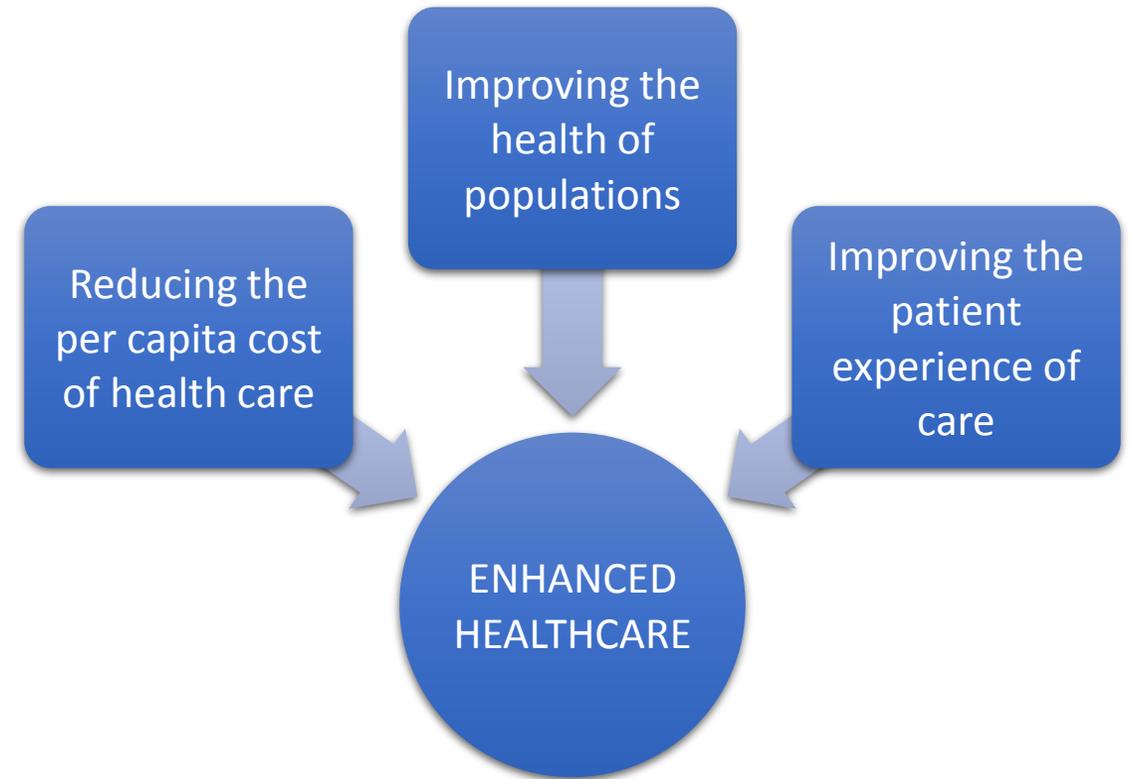
Embracing Technology to Address the Triple Aim of Healthcare

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The IHI Triple Aim

Aging populations and increased longevity, coupled with chronic health problems, have become a global challenge, putting new demands on medical and social services.



Meet Rita

- 72 year old female
- Lives alone in senior housing
- Struggles managing her chronic anxiety, depression, COPD
- Substance use disorder diagnosis
- Certified by the state to need a nursing home level care
- Frequent Emergency Room visitor
- Fall risk
- Recently experienced a significant loss in her life
- No formal family support
- No license - relies on public transportation or friends
- Receives Meals on Wheels
- Receives personal care and homemaking assistance 2x/week



Problems to Solve:

Multiple Chronic Illnesses

- Aging adults experience higher risk of chronic disease.
- In 2012, 60% of older adults managed 2 or more chronic conditions. Chronic conditions can lower quality of life for older adults and contribute to the leading causes of death among this population.

Injury Prevention

- Falls, the leading cause of injury among older adults, are treated in emergency departments every 13 seconds and claim a life every 20 minutes. Every year, 1 out of 3 older adults fall, yet less than half tell their doctor.
- Falls-related injuries and deaths can be prevented by addressing risk factors.

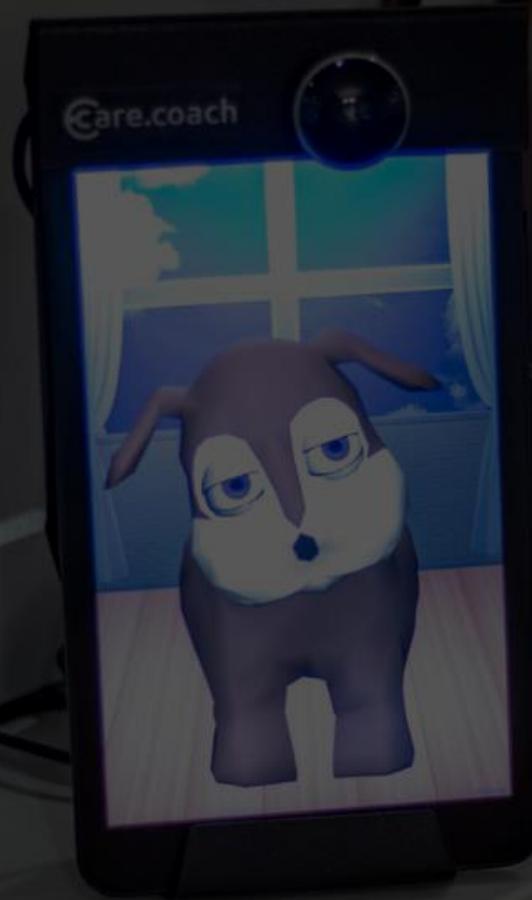
Loneliness

- Loneliness has devastating emotional, physical, and economic consequences. It increases the chance of premature death by 26%.
- Loneliness has the same effect on the human body as smoking 15 cigarettes a day. Loneliness is even worse for longevity than being obese or physically inactive.

Caregiver Shortage and Burnout

- The need for unpaid and paid caregivers will increase as the U.S. population ages.
- Approximately 25% of U.S. adults 18 years of age and older reported providing care or assistance to a person with a long-term illness or disability in the past 30 days.

How can we
embrace
technology to
to support
high-acuity adults
in their day to day
lives?



Element Care PACE Program

Quality Improvement Project

12 participants

4 months duration

Target participants:

- Frequent Emergency Department visitors
- High risk and frequent fallers
- Substance use disorder diagnosis

Goals:

1. Reduce number of nursing or personal care visits
2. Reduce ED utilization and hospital admissions
3. Provide additional psychosocial support and health education



Participant Highlight

Mary visited the ER eight times in five months due to high anxiety, frequent complaints of chest pain, poor coping skills and relaxation strategies

Mary continually used the ER as a coping mechanism resulting in an average of three visits per month.

Mary received an avatar at the end of March 2017

An immediate decline in ER visits for the following three months was observed

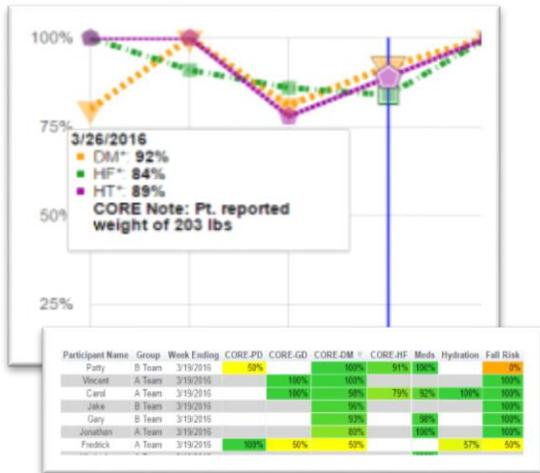
As Mary's interactions with the avatar increased, a consistent drop in ER utilization was recorded over the next 18-month period.

Mary now demonstrates improved communication skills and enhanced outreach to the appropriate medical teams at Element Care and is able to accurately report signs and symptoms that interfere with activities of daily living.

As of 2019, Mary has continued to interact with the avatar regularly and has remained in the community (instead of long-term care) and out of the ER for the last six months.

Improved Outcomes

PROVIDER PORTAL



Integrates with clinical workflow

Maximizes care management resources

HIPPA complaint platform

Weekly outcomes reporting

Email + phone alert triggered alerts

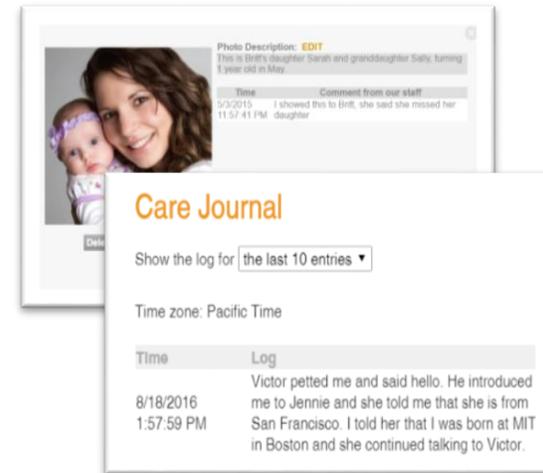
Displaying 1-4 of 4 results.

Record Id	Customer Name	Customer Timezone	Scheduled Time	Task Name	Question	Answer	Answer Time	Operation
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FAMILY PORTAL

Health Advocate Journal Entry -

I woke up and saw PATIENT. I greeted him good morning. He was already taking his medications. I asked him a few health related questions and reminded him of his class today. He told me he feels like quitting his Matter of Balance class because he does not find it helpful. We spoke about why he doesn't find it helpful and I encouraged him to continue the program. I said I will be here to talk about it when he gets home and to support him through this educational experience. He said thank you and that he will at least try one more class today. He said he really enjoys my company and the friendship I have provided to him.



Family Feedback Log -

Thanks for coming along with us! Everyone was astounded when I told them about you last time so I thought I should introduce you. Without you, my dad would definitely be in a nursing home and that--as I saw those last 8 days in December--would not be a good thing. After 4 years, I am certainly sick of this. But you have allowed me to keep him safer and happier than he would be anywhere else. You, along with his daycare, are absolutely amazing!

Lower Costs and Patient Satisfaction

Pilot Program Financial Outcomes

(March 2017-August 2017)*

42 Avatar Interventions

Replaced 11 RN/PCH Visits

\$1,300/average ED cost

\$1,016/week

\$54,600

\$16,516

\$71,116

Participant Questionnaire

54% Stated their degree of loneliness had **improved** since receiving an avatar

23% Stated their quality of life had **improved** since the avatar

46% Stated their level of nervousness or anxiety actually **decreased** since receiving an avatar



In Summary



Embracing technology can assist with:

- Continuity of care
- Enhanced psychosocial support
- Engaging families and care teams
- Improving patient satisfaction and experience
- Better self-management of chronic conditions
- Reducing risk, avoidable utilization, and cost of care

Element Care Staff Testimonials

“The avatar represents a positive encouraging presence in the homes of our frail elderly participants. It provides them with the reassurance that someone is always there to help.”

-Sarai, Nurse Practitioner

“I feel like the avatar works miracles. It helps people feel a connection to avoid loneliness. It also helps people stay safe in their home.”

-Donna, Social Worker

“The avatar gives us peace of mind for participants who are fall risks by extending their exercise program to their home.”

-Sue, Physical Therapist

Questions/Comments

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