Appendix B: Return on Investment, Business Case and Costs

Return on Investment

The following logic model describes the return on investment when C4C is implemented.

Inputs, and Short- Medium- and Long-Term Outcomes for the Health System

Inputs

1 part-time social worker, psychologist or advance practioner with family-systems training

1 part-time project coordinator

Leadership support

CARE Act compliance

Training

C4C Playbook

Learning Community participation

Short-term Outcomes (0-6 months)

System change re: inclusion of caregivers on care teams and compliance with CARE Act

Statistically and clinically significant reductions in caregiver depression, anxiety and burden

Caregivers are better able to manage their own and their care recipients' physical and emotional health

Caregivers are better able to provide needed care at home for their care recipients, including complex medical care

Medium-term Outcomes (6-12 months)

Reductions in care recipient re-hospitalization, length of stay and emergency department visits

Ongoing re-evaluation to re-engage caregivers in C4C as appropriate results in ongoing reductions in use of services

Long-term Outcomes (12 months or longer)

Healthcare providers are better able to work at their highest levels of practice

Reductions in hospitals and re-admissions, resulting in reduce penalties

Improved patient outcomes and quality scores

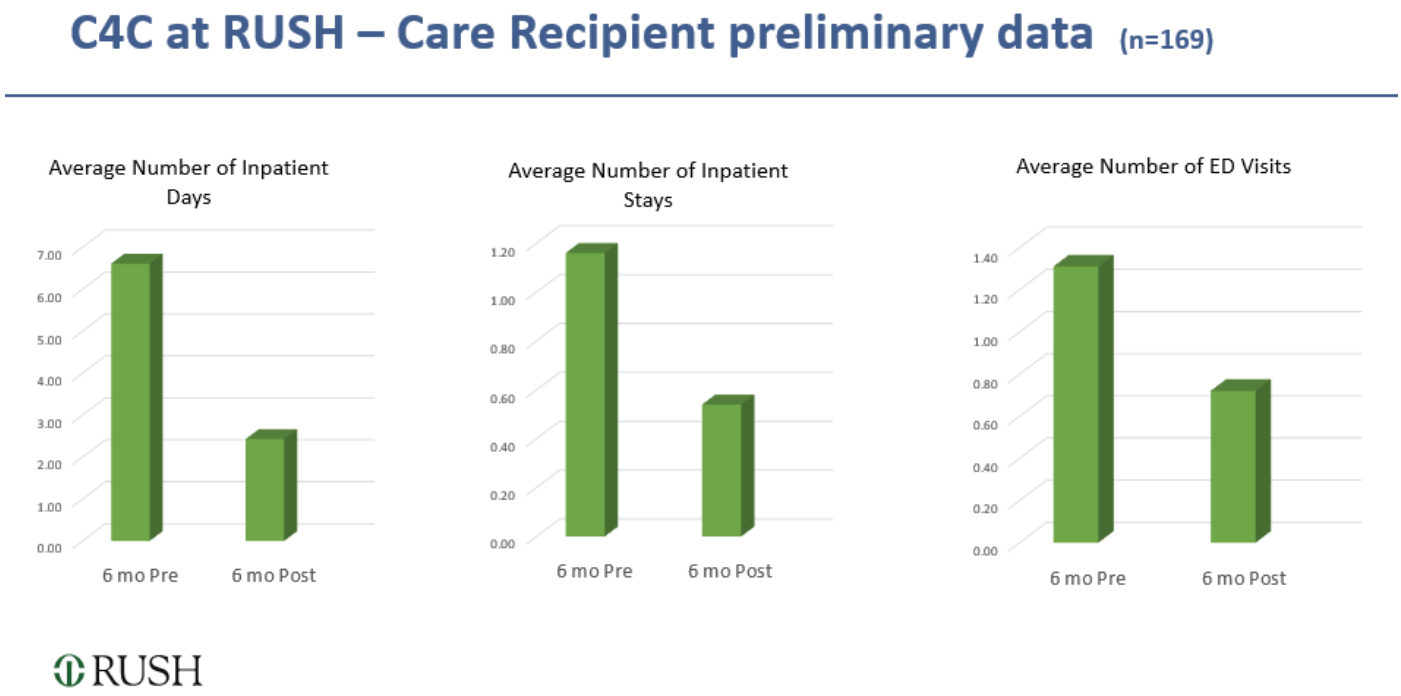
Anticipated improvement in patient satisfaction survey results

Reduced costs for patients, caregivers and health care systems

Reduced caregiver stress and improved health of caregivers and care recipients

The return on investment for health systems following implementation of the C4C Model can occur at many levels. One level includes the potential for reduced penalties for rehospitalizations, lengths of stay, and emergency department (ED) visits for care recipients. Another level includes reductions in self-reported symptoms of anxiety and depression as well as feelings of stress or burden in caregivers, who are often patients of the health system as well. These outcomes have clear implications for health systems overall with a strong business case to be made to administrators about the value of Caring for Caregivers in health systems.

The graphs below show the reductions in average number of inpatient days, average number of inpatient stays, and average number of ED visits for 169 older adults who were patients at Rush University Medical Center from July 1, 2019 through October 30, 2022 with any hospitalization days or emergency department (ED) visits and whose caregivers were enrolled in the C4C program. Data compares hospital days, hospital stays, and ED visits from 6 months before to 6 months after their caregivers' participation in C4C.

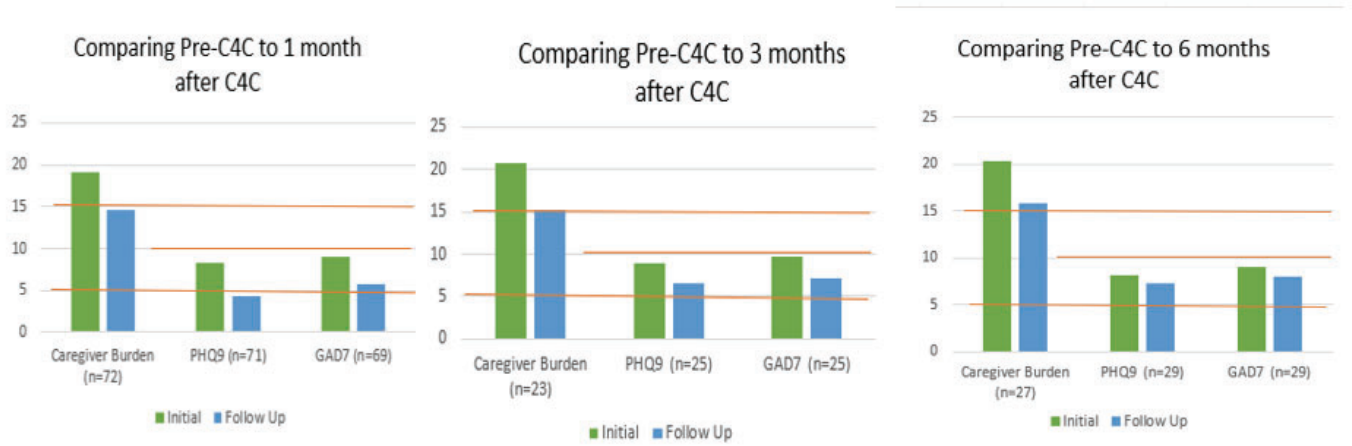


While these data do not These data do not account for death or hospice care use of care recipients during this time period and is not meant to suggest direct causality, but because of the proximity of the intervention and the clear pattern of reductions, it is reasonable to assume the intervention has an impact on these important metrics and an association between care recipient health utilization and caregiver C4C involvement.

As noted above, Caregivers' participation in the C4C at Rush provided self-reports of feelings of stress or burden and symptoms of depression and anxiety. These were collected using the Burden Scale for Family Caregivers (short form), the Patient Health Questionnaire-9 (PHQ-9), and the General Anxiety Disorder-7 (GAD-7).

Below are graphs comparing scores for pre-intervention to follow-up scores at one-, three- and six-months post-intervention. The orange lines indicate accepted clinical cut offs for low, medium, and high levels for each measure. All of these outcomes align well with value-based care considerations in health systems.

C4C at RUSH - Caregivers



RUSH

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores are another consideration in assessing the business case for C4C implementation, and these scores are likely to improve for the care recipients of actively involved caregivers. Evidence shows that there are positive clinical implications for care recipients when caregivers are asked about their own health and wellbeing and resources are provided. (Levine, C. et.al., 2014) There is anecdotal evidence that suggests that they are often the people who respond to satisfaction surveys, and their satisfaction can aid in improved HCAHPS scores for the health system.

Costs

The costs of implementation vary based on the cumulative staff time needed to first implement systems change components (e.g., EHR builds, provider trainings) and staff time to provide the C4C intervention. (average amount of time spent per caregiver plus project coordination and leadership support). Time spent providing C4C may vary based on programmatic structure, such as whether components are offered directly by C4C (vs. being met through referral to another initiative) and how much active work is needed by a project coordinator to continue building new clinical partnerships, monitoring data, and addressing workflow and EHR challenges.

To offset costs, programs can analyze their impact on quality measures and care recipient utilization of care as in the Rush examples described and illustrated above above. Program costs can also be supported directly by billing the caregivers' health insurance for psychotherapy billing codes when appropriate. Beginning with a pilot covered by hospital operational funds can help secure additional hospital funding and philanthropic funding while you scale up billing.

Much of the cost of implementation is primarily the cost of the providers' time, which is billable under most insurances.

Tasks, People and Time Commitments

The C4C program works best when staff have time carved out of their usual workload to take the program on. The primary workload affected is that of the Licensed Clinical Social Worker or other psychotherapy-trained professional who will provide the bulk of the intervention components. The most time-consuming component of C4C is the Planning for What Matters Sessions, which may require 1-5 hours of direct service in addition to recruitment and contact time required.

The overall time requirements for successful program implementation are:

- Site champion to facilitate change and program promotion at approximately 60 minutes per month
- Program Lead to coordinate activities and timely completion of deliverables at approximately 90 minutes per month
- Licensed Social Worker or Psychologist to provide intervention and documentation
    - Minimum hours anticipated for this staff = 8 hours per family caregiver
- 1-hour orientation and 4-hour training, as well as quarterly Learning Community meetings of approximately 90 minutes each
- Data entry and management at approximately 30 minutes per month
- For those health systems currently without the ability to enter caregivers into the electronic health record, collaboration with IT team to develop an implementation plan for inclusion of caregivers in the EHR is estimated at approximately 60 minutes per month

Billing

The ability to bill for the clinical components of Caring for Caregivers provides providers with an enormous advantage when considering implementing the program. It allows for providers to:

- Offer services within their settings,
- Increase internal staffing as needed to provide services, and/or
- Contract with community providers to offer components of the program

If your setting has a variety of specialty areas represented (such as Rehab or a Skilled Nursing Facility):

- Caring for Caregivers components may be offered as a standard part of the clinic's practice
- Caregivers may or may not incur additional charges over and above those that are part of the practice, and those charges are typically billed to the caregiver's insurance

If your setting has only one specialty areas represented (such as an outpatient psychotherapy setting):

- Billing is usually done through the caregiver's insurance
- If the care recipient is present for the session along with the caregiver, billing may be done through the care recipient's insurance
    - When this is a Planning for What Matters Session, it may be billed as Family Psychotherapy (with the patient present).

Additional details about billing codes are provided in Appendix E – Billing Codes and Considerations.