



Team CarePal

Caregiving Together

Working Paper:

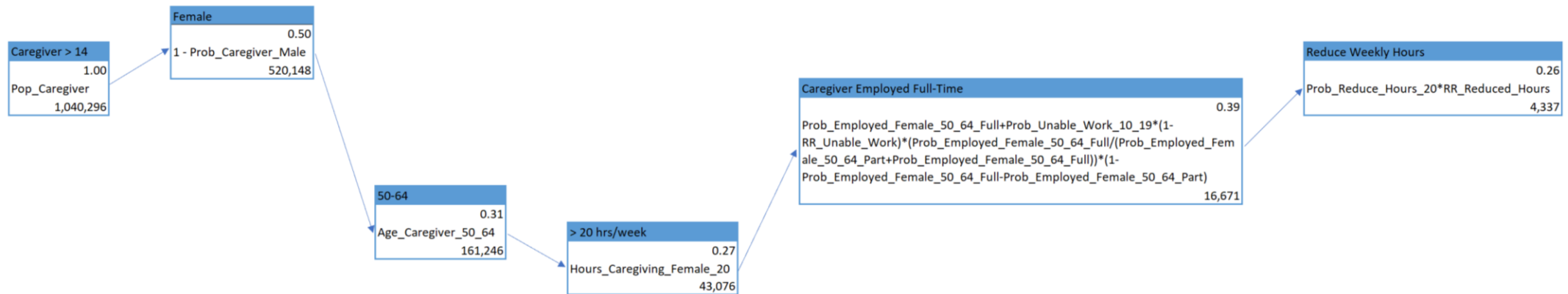
Health Economic Model of Team CarePal in the Support
of Caregivers and Their Loved Ones

The Model

- The model seeks to quantify potential health benefits and cost-savings to various stakeholders and payers.
- Based on cost-effectiveness methods used in health technology assessment (HTA).
- Uses existing research to parameterize the model.
- Finds the total “headroom” for caregivers in terms of cost and reduced health and makes reasonable assumptions about Team CarePal’s ability to alleviate them.



Example Model Pathway



Stressed_Caregiving_20*RR_Stress	Health_Loss_Caregiving_20*RR_Health_Loss	Inc_Caregiver_Burden_20*RR_Caregiver_Burden	Inc_CHD_Female_50_64*RR_CHD_Caregiver_50_64*RR_CHD + (1-RR_CHD)*Inc_CHD_Female_50_64	Mort_Female_50_64	Caregiver Health Utility
0.50	0.37	0.19	0.01	0.00	(HU_Female_50_64+HU_Dec_Stress*(Stressed_Caregiving_20*RR_Stress)+0.5*HU_Dec_CHD*Inc_CHD_Female_50_64*RR_CHD_Caregiver_50_64*RR_CHD + (1-RR_CHD)*Inc_CHD_Female_50_64) - 0.5*Mort_Female_50_64*(HU_Female_50_64+HU_Dec_Stress*(Stressed_Caregiving_20*RR_Stress)+HU_Dec_CHD*Inc_CHD_Female_50_64*RR_CHD_Caregiver_50_64*RR_CHD + (1-RR_CHD)*Inc_CHD_Female_50_64) + 0.5*((Prob_Patient_LTC_Current*RR_LTC+Prob_Patient_LTC_Potential*(1-RR_LTC))+(Mort_Male_65*Prop_Caree_Male+Mort_Female_65*(1-Prop_Caree_Male)))*(HU_Female_50_64+HU_Dec_CHD*Inc_CHD_Female_50_64*RR_CHD_Caregiver_50_64*RR_CHD + (1-RR_CHD)*Inc_CHD_Female_50_64)
2,164	1,592	826	24	4	3,515



Results

- The results here make reasonable assumptions about the potential of Team CarePal to improve caregiver health and well-being, as well as the effect of these improvements on costs and economic outcomes.
- Reflect costs and benefits over a 1-year period.
- Costs in Canadian \$ inflated to 2022. Health Benefit measured in quality adjusted life years (QALYs) and valued at \$50,000 per QALY.
- The full model explanation, calculations, and research are contained in the full report: “Health Economic Model of Team CarePal in the Support of Caregivers and Their Loved Ones”.



Case Study: A Mid-Sized Company

When applied to a company with 500 employees with an average age of 45, 60% of whom are female:

- 26 fewer employees will experience significant stress due to caregiving and 18 fewer employees will experience a health loss.
- The health system saves \$6,429 in caregiver health costs and \$72,676 in LTC costs for the caree. The QALY gain is worth \$103,280.
- The employer and employees gain 11,161 hours of work that would have been missed due to caregiving, worth \$563,545 based on the average wage in Alberta.



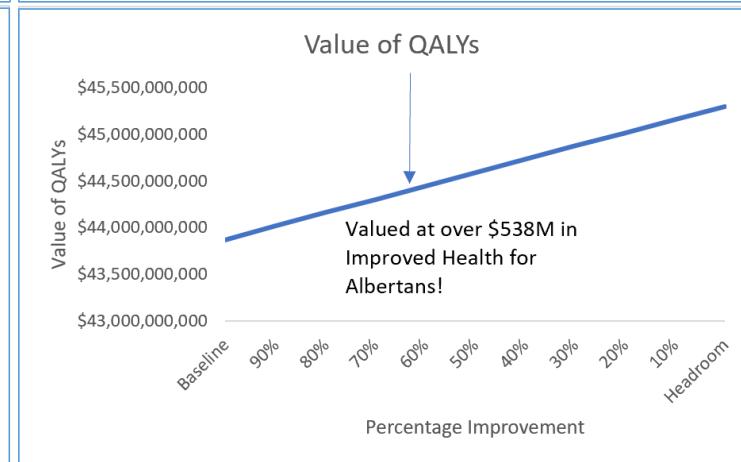
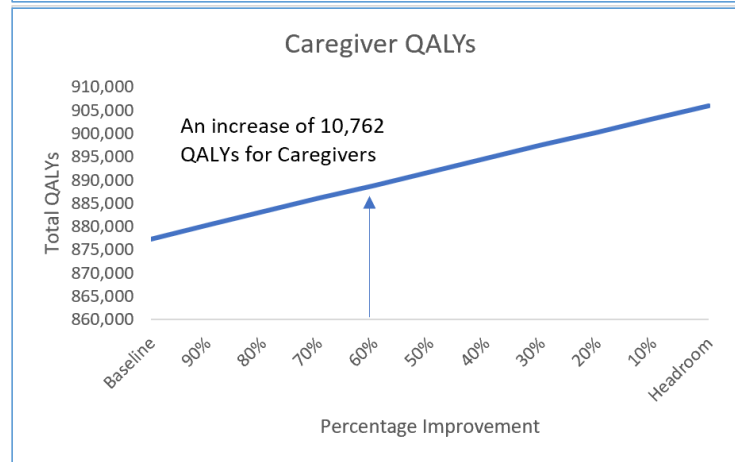
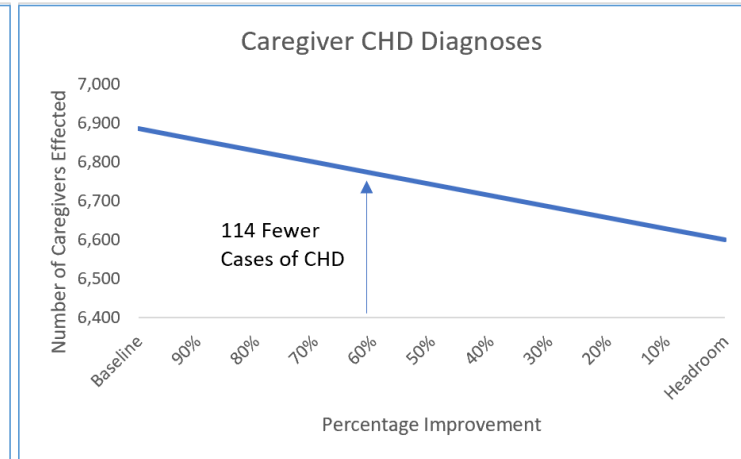
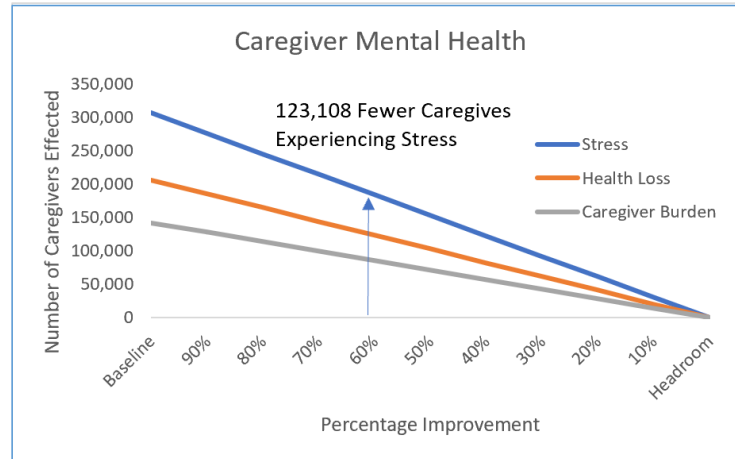
Case Study: A Caregiver Support Organization

When applied to an organization supporting 1,000 caregivers in Alberta:

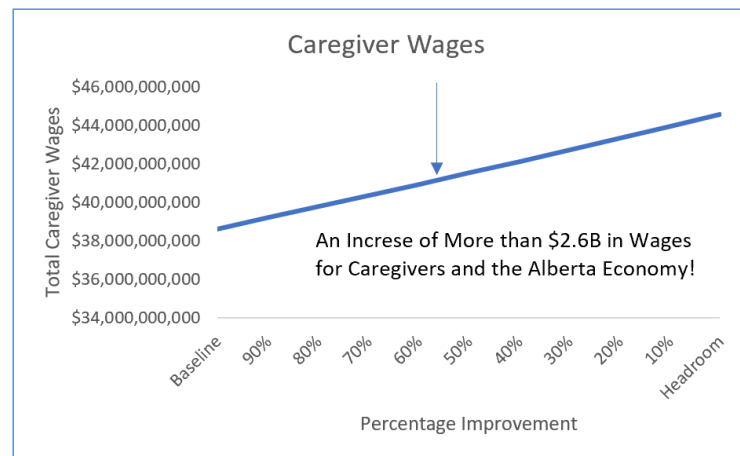
- 118 fewer caregivers will experience significant stress and 80 fewer caregivers will experience a health loss.
- The health system saves \$29,435 in caregiver health costs and \$332,767 in LTC costs for the caree. The QALY gain is worth \$517,244.
- The caregivers gain 43,965 hours of work that would have been missed due to caregiving, worth \$2.5M based on the average wage in Alberta.



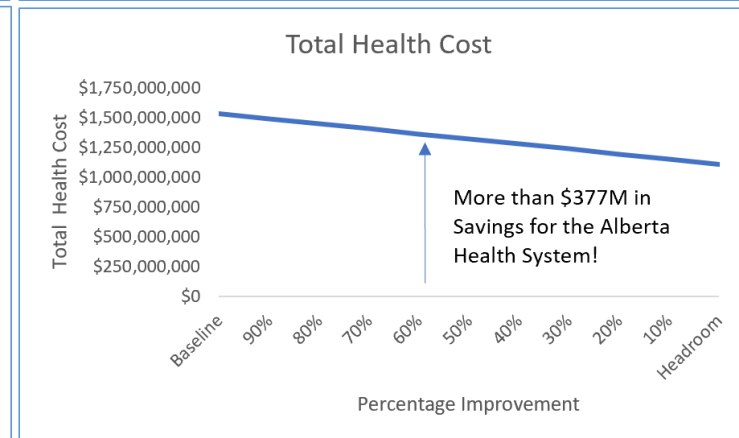
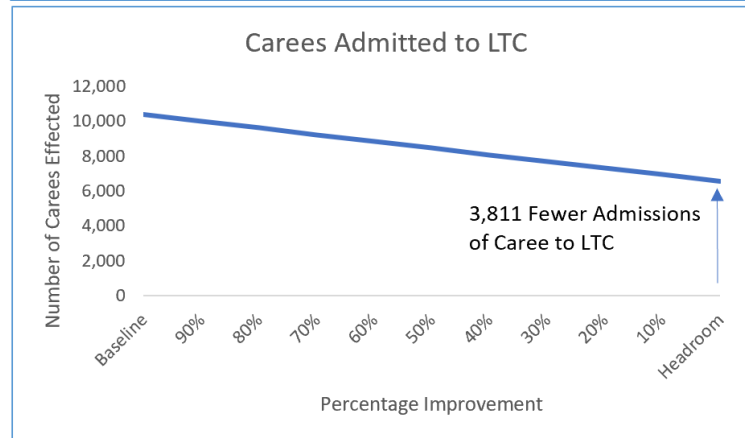
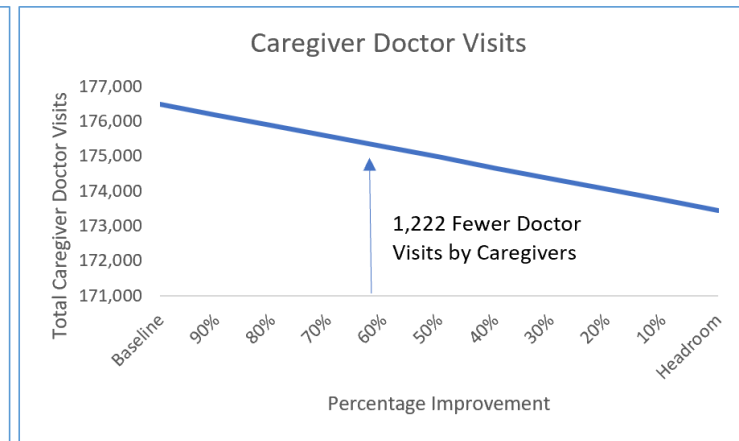
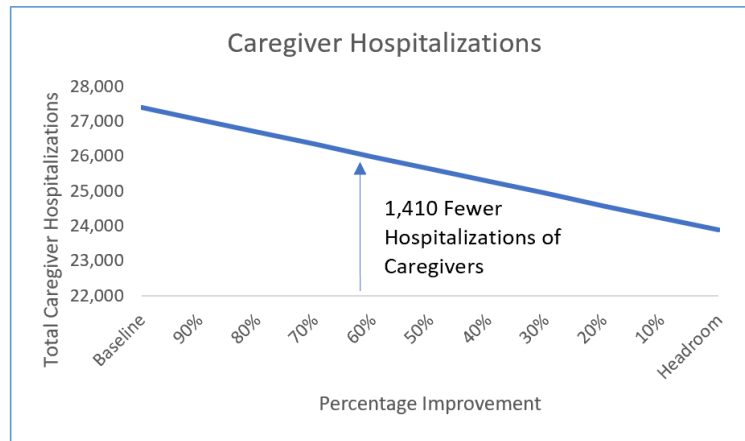
Budget Impact Analysis: Health Benefits



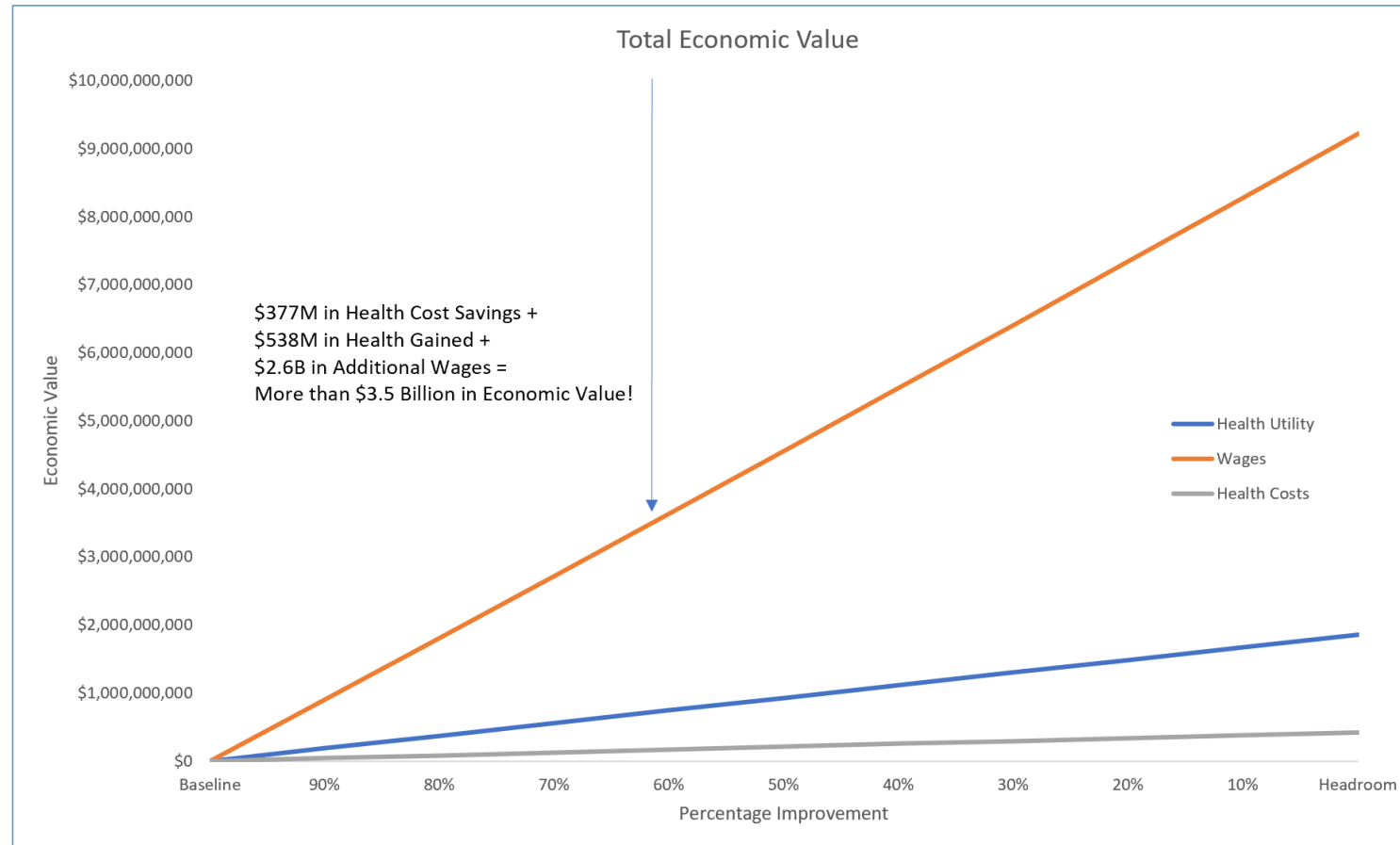
+ Economic Benefits



+ Cost Savings



= Significant Monetary Value!



Value per User and Pricing

These values assume that LTC costs are split evenly between individuals and the health system and that earnings are taxed at 30%.

- The total value per user of Team CarePal in this scenario is \$3,389 per year. This can be applied to potential payers with \$1,449 accrued by the health system, \$1,916 by the caregiver, and \$2,509 by the employer.
- These values represent the theoretical maximum price that Team CarePal can charge these users and remain cost-effective. Pricing below these levels represents a net-benefit to the health system and caregivers.



A Few Notes

- The model does not capture all the possible benefits of the app, it focuses on a few important aspects of health and costs. It is not meant to be an exhaustive review of potential outcomes but a concise, evidence-based analysis of Team CarePal's main value drivers.
- The model is a working representation of Team CarePal's potential to increase health and save costs. It can be updated with new parameters and effectiveness scenarios as data become available.
- See the report for full methods and calculations.



Thank you!

Join our online event June 5th on
**Transforming Continuing Care
with Team CarePal: Health
Economic Modeling**

[Click Here](#) or scan to register:



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