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Starlight Children's Foundation® Canada (Starlight) offers numerous programs tailored to specific children based on their level of disability and parental needs. This heterogeneity in program offerings provides multifaceted societal and economic benefits that are problematic to evaluate using a common methodology. While Starlight collects extensive data on all programs and is undergoing a review to identify gaps and refine analyses and reporting capabilities, the organization commissioned The Collaboration Vector Inc. to conduct two in-depth pilot outcomes studies. In 2016, a Great Escapes Study was completed and in 2015, a Tablet Program Study. A brief overview is provided here along with a discussion of current relevance of study findings. This letter is intended to accompany the full results reports published on Starlight's website.

**-Great Escapes Study:** Great Escapes Wish is an on-going Starlight program that offers children with chronic medical conditions and their parents special fun filled events. The specific type of event varies, including driving in exotic cars, movie screenings, harbor cruises, adapted skiing, holiday parties and sleepovers. The advantage of this heterogeneity is that it can offer events tailored to specific children based on their level of disability. At Starlight's request, The Collaboration Vector designed a study to assess outcomes from a Great Escapes one-day event at a resort complex in 2016 for 51 children with serious chronic conditions (most common conditions were cerebral palsy and genetic/chromosomal abnormalities). Outcomes were based on parent surveys which assessed the financial impact of their child's disease (direct healthcare costs, additional parental costs and family work hours lost over the past month), the well-being of the child (quality of life and emotional well-being) and their perceived value (Willingness to Pay for the program) and overall satisfaction with the event. To quantify the impact of the event, parents completed three surveys; one survey a month before the event, a second immediately after the event and a third, one month after the event. Comparison of outcomes from the first and third surveys was used to assess the overall impact of the event. In brief, the Great Escapes event had a positive impact on the quality of life and emotional well-being of the children and led to output cost savings of 50%, 18% and 23% in direct medical costs, parental costs and productivity losses, respectively, one month after the event and a Willingness to Pay value of \$362.32. Based on the cost savings, a strongly positive Social Return on Investment (SROI) value of 3.49 was estimated (based on Starlight costs associated with event development and the estimated societal monthly cost savings from parent responses). Within the context of this Great Escapes event, this means that for every \$ spent by Starlight in preparing the event, there was a \$3.49 societal impact, reflecting a large return on investment. This study was carried out in 2016. However, there is strong evidence that the results are still relevant. The Great Escapes program remains a very popular offering from Starlight for the families of children with disabilities and several events are planned each year. Anecdotal comments from parents on the positive impact of recent Great Escapes events on their children indicate that the program remains highly effective. In addition, although the positive SROI was estimated based on outcomes from 2016, corrections for inflation to 2022 using the Consumer Price Index would likely lead to similar adjustments in the Starlight-related Great Escape input costs and the estimated direct medical, parental and productivity output cost savings generated. As a result, the SROI value estimated



in 2016 (3.49) would likely be unchanged in 2022 indicating a continued positive societal impact from this program.

**-Pediatric Tablet Program:** The objective of this pilot study was to assess the impact of a pediatric tablet program initiated by Starlight on promotion of education, social interaction and the emotional well-being of children with disabilities and their non-disabled peers. The study was carried out at the Quebec Society for Disabled Children daycare and was designed to determine if the tablets met the needs of the institution. The tablets provided were preloaded with custom-selected software applications appropriate for the needs of the children and their educators. Outcomes were based on questionnaires completed by daycare personnel (n=11) which asked for their assessment of level of overall satisfaction with the tablets and the impact on learning, social interaction, maintaining engagement and emotional well-being in disabled and non-disabled children attending the daycare. The program was judged to be very effective for both groups of children. For the disabled children specifically, the tablets were rated as effective or highly effective in promoting learning (91% of survey participants), enhancing social interaction (73%) and maintaining engagement (82%) and 91% of surveyed staff thought the tablets had a positive impact on the emotional well-being of the children.<sup>1</sup> Overall, 73% of surveyed staff were very or extremely satisfied with the tablets as a tool for disabled children. These encouraging results demonstrated that the tablet program was an effective tool that can be adapted to specific educational and health care facility needs. The 2015 results provided the groundwork for the program which continues to be a popular and effective service provided by Starlight. Notably, the tablet program grew in importance during and since the pandemic with Starlight enabling much needed virtual socialization for chronically ill hospitalized and house-bound children and peer support for their families. Recent published studies, using a similar methodology to the study described here, have also confirmed the effectiveness of tablets in the teaching of children with disabilities and in enhancing engagement in this population.<sup>2,3</sup> Therefore, we believe the results obtained from the tablet study in 2015 are still relevant to current tablet programs provided by Starlight.

These studies illustrate the positive societal impact of two of Starlight's many programs. Although they were carried out over five years ago, both programs are still ongoing and the results provide a measure of the societal outcomes to be expected from Starlight's current programs.

A handwritten signature in black ink that reads "John McCormick".

John McCormick, PhD.  
Research Lead  
The Collaboration Vector Inc.

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<sup>1</sup> El-Chibini S. Starlight's pediatric tablet program proves impactful. Canadian Healthcare Technology. April 22, 2015.

<sup>2</sup> Wiley B et al. Exploring the use of tablets (iPads) with children and young adults with disabilities in Trinidad. Disabil Rehabil Assist Technol 2016;11:32-7.

<sup>3</sup> Lindeblad E et al. Assistive technology as reading interventions for children with reading impairments with a one-year follow-up. Disabil Rehabil Assist Technol 2017;12:713-24.