

YMCA-PEER Buddy Program

Pilot project

Presenters

Carolina Chamorro-Viña, PhD & Chantelle Ball, MKin, CSEP-CEP

September 18, 2026

PEER in action















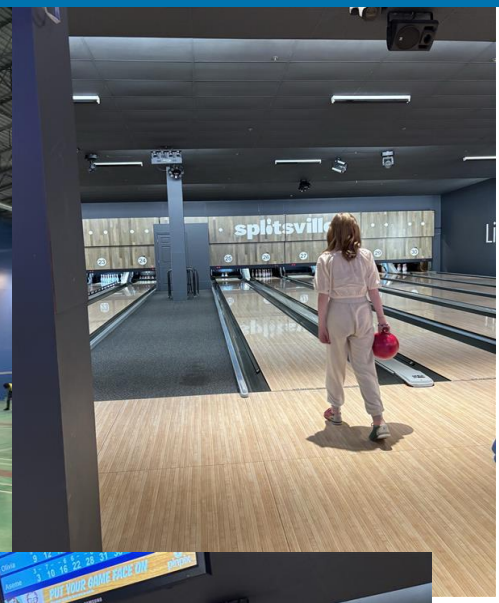
PEER Teens (2024-2025)



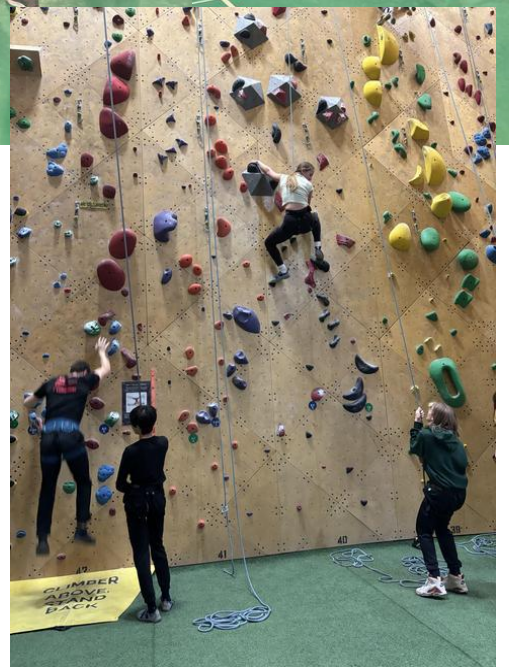


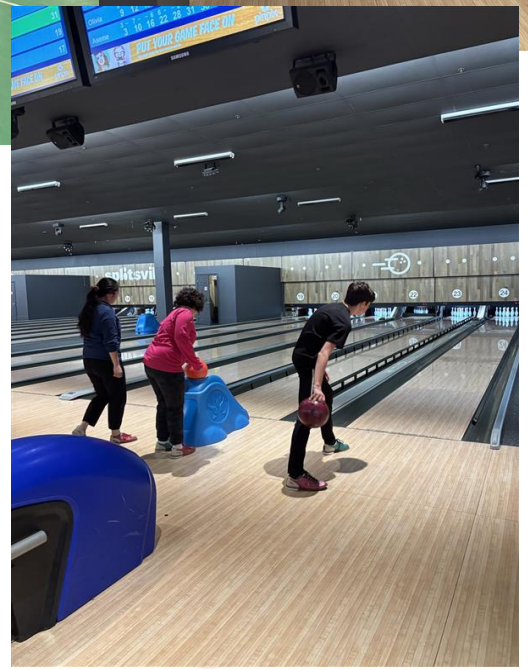








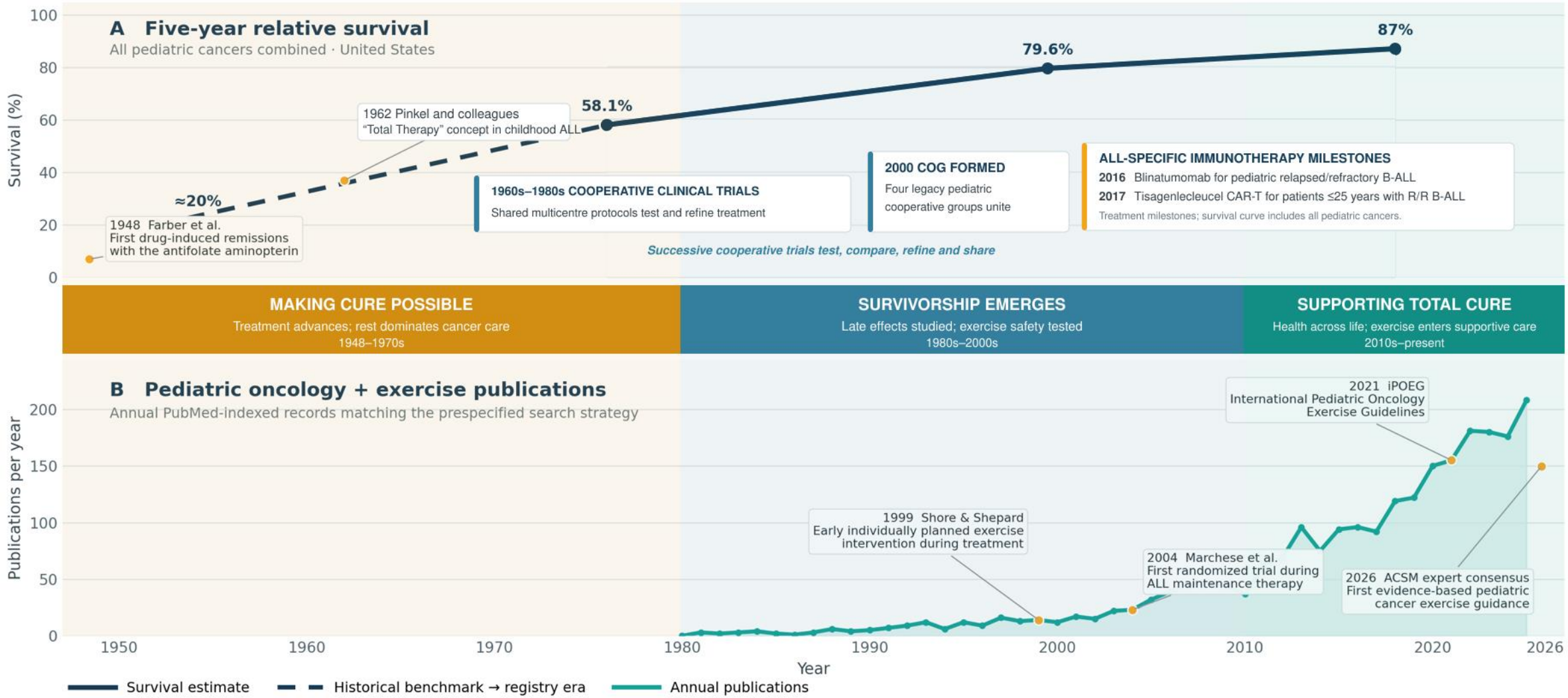




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Two parallel advances in pediatric oncology

Survival improved dramatically—and research on exercise as supportive care accelerated.

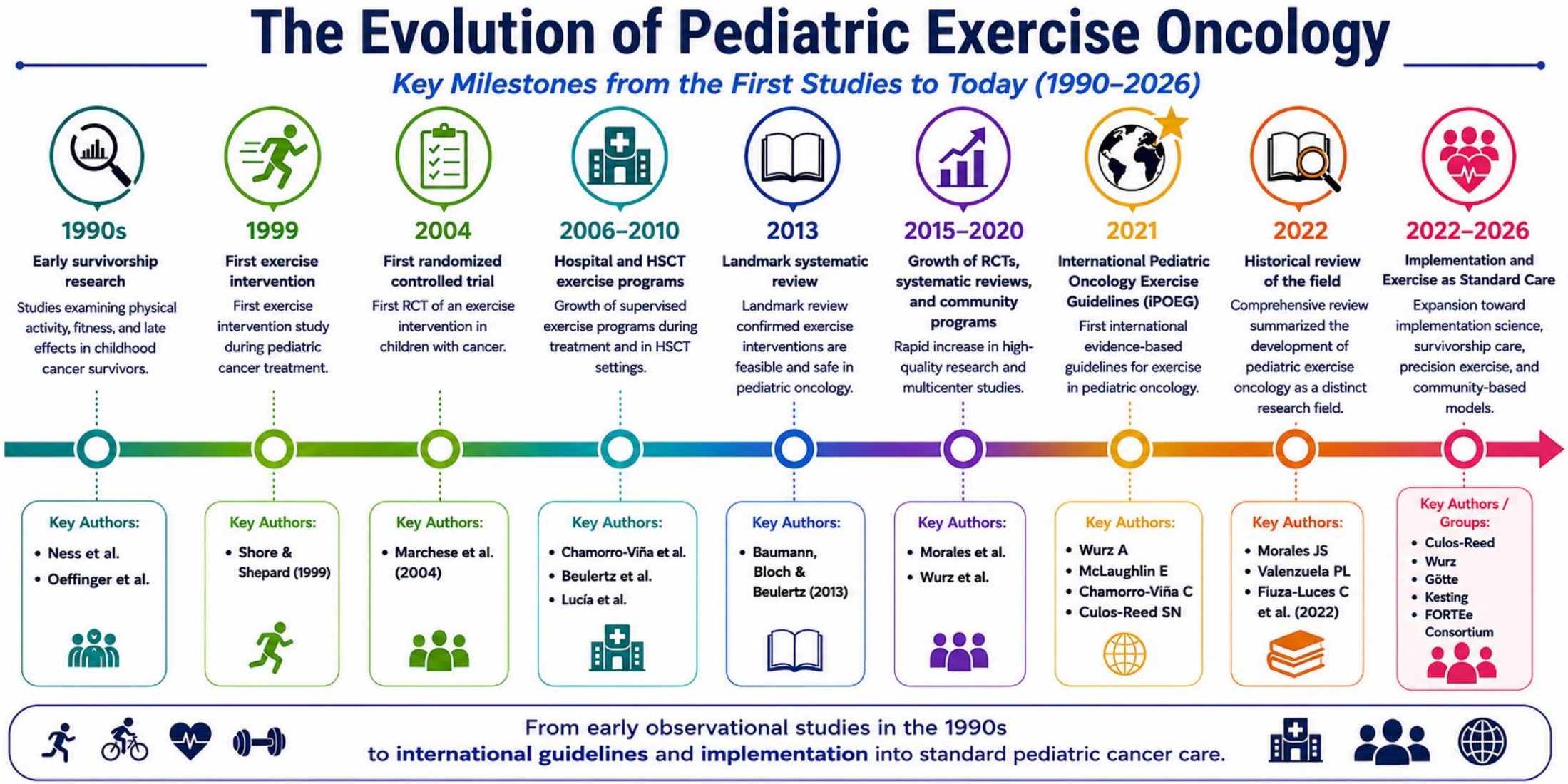


Notes: "Survival" is 5-year relative survival for all pediatric cancers combined. The 1950–54 value (~20%) is a historical benchmark and is shown with a dashed segment because it predates SEER and may differ in registry coverage/age definition. Modern values: 1975–77, 1996–2003, and 2015–21. Publication counts cover complete years 1980–2025; 2026 is excluded because it is incomplete. Counts reflect search retrieval, not a manually screened systematic review.

Sources: NCI/SEER historical statistics; AACR Cancer Progress Report; PubMed (search run 15 Sep 2026); Farber et al., NEJM 1948; Morales et al., Cancers 2022; Wurz et al., Transl Behav Med 2021; ACSM Expert Consensus Statement 2026.

Additional source: Reaman GH. Am Soc Clin Oncol Educ Book. 2012;32:149–151.

Main milestones



Morales JS, et al. Exercise and Childhood Cancer-A Historical Review. Cancers 2022;14(1):82.

ACSM Consensus Statement 2026

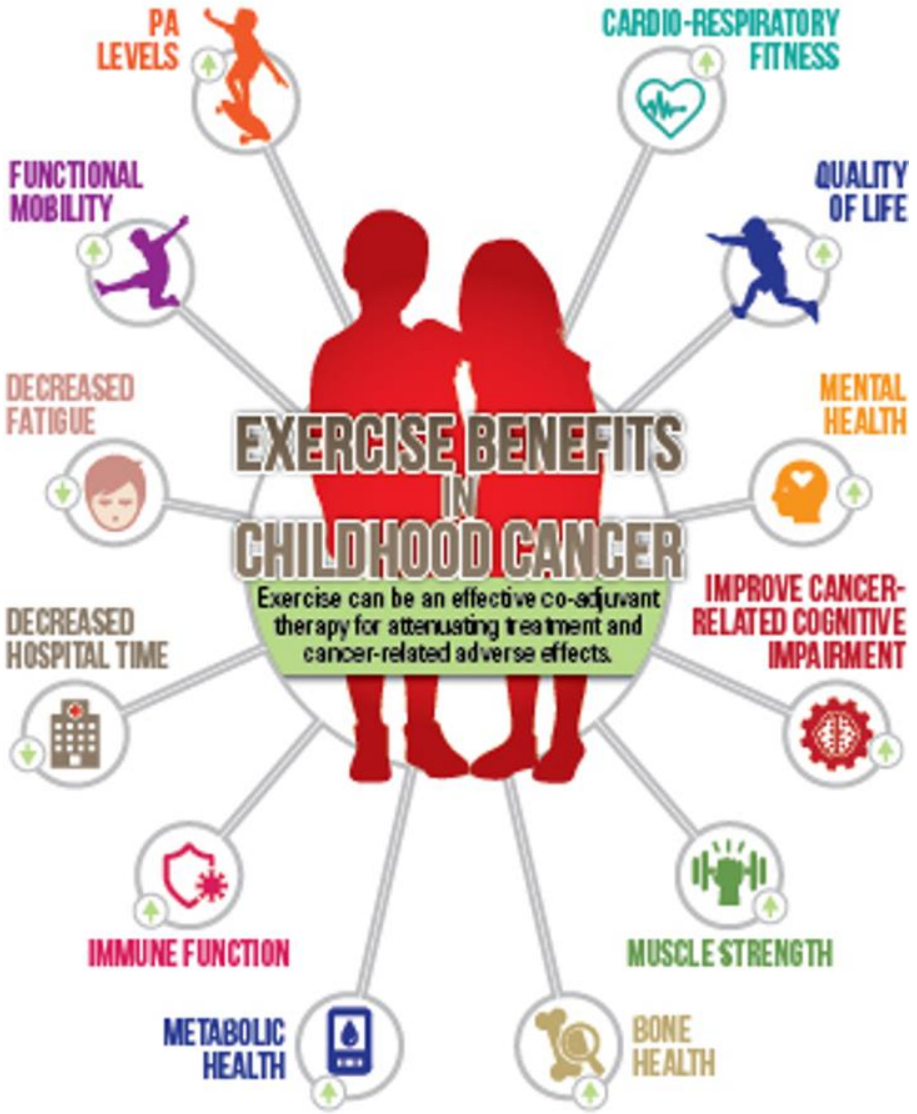
SPECIAL COMMUNICATIONS

Initial Exercise Guidance for Children and Adolescents during and beyond Cancer Treatment: ACSM Expert Consensus Statement

MARTIN K. FRIDH[1], SABINE KESTING[2,3], MARIE A. NEU[4,5], PEDRO L. VALENZUELA[6], MATTHEW WOGKSCH[7], S. NICOLE CULOS-REED[8,9,10], KATHRYN H. SCHMITZ[11], KIRSTEN K. NESS[7], STEVEN J. FLECK[12], CARMEN FIUZA-LUCES[13]and ALEJANDRO LUCIA[12]

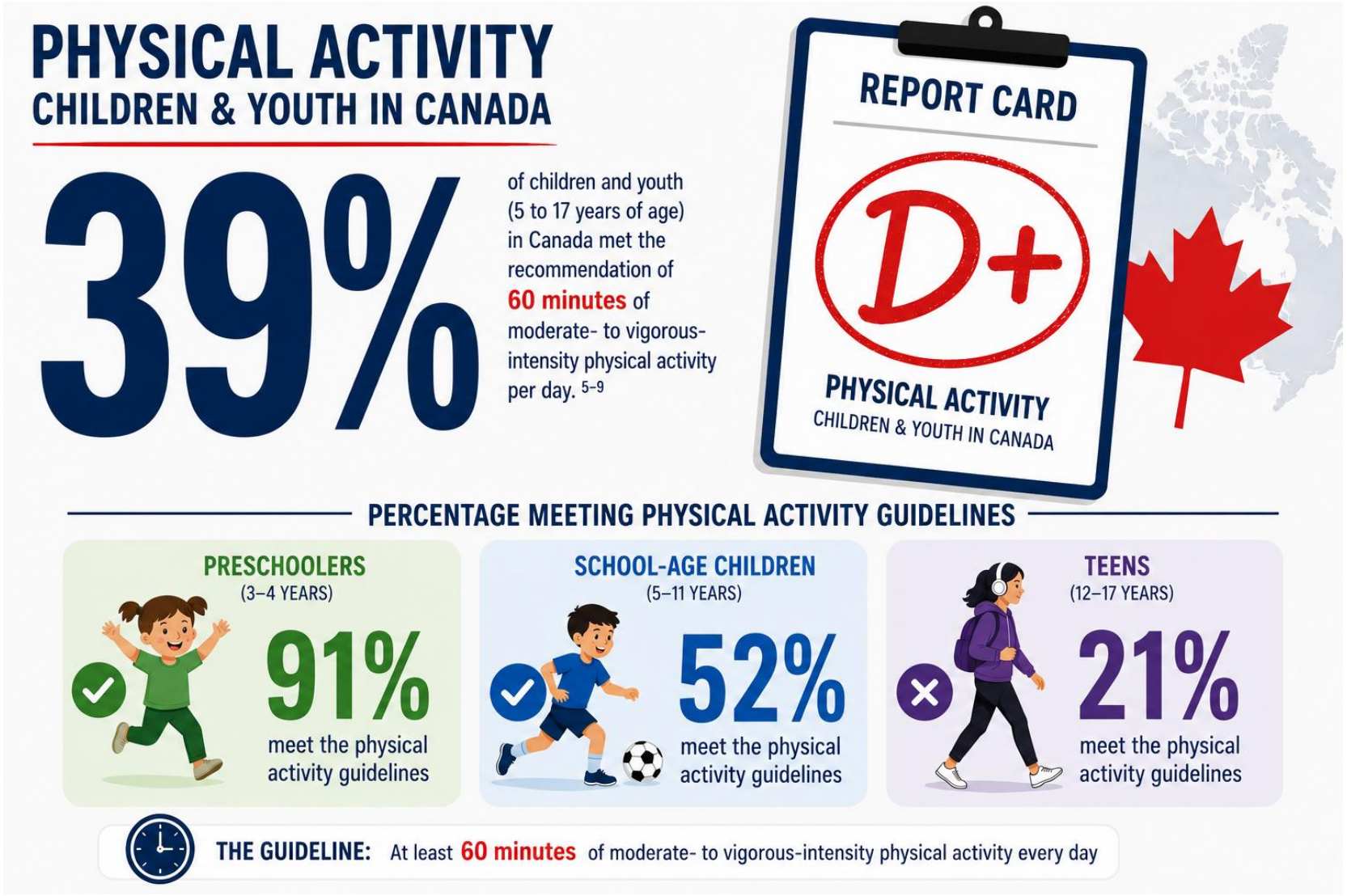
[1]Department of Pediatrics and Adolescent Medicine, University Hospital Rigshospitalet, Copenhagen, DENMARK; [2]Department of Pediatrics, TUM School of Medicine and Health, Technical University of Munich, German Center for Child and Adolescent Health (DZKJ), Partner Site Munich, Munich, GERMANY; [3]Institute of Preventive Pediatrics, Department Health and Sport Sciences, TUM School of Medicine and Health, Technical University of Munich, Munich, GERMANY; [4]Pediatric Hematology/Oncology, Department of Pediatrics, University Medical Center of the Johannes Gutenberg-University Mainz, Mainz, GERMANY; [5]Childhood Cancer Center Mainz, University Cancer Center Mainz (UCT Mainz), University Medical Center of the Johannes Gutenberg-University Mainz, Mainz, GERMANY; [6]GENUD Toledo Research Group, Faculty of Sport Sciences, University of Castilla-La Mancha, Toledo, SPAIN; [7]Department of Epidemiology and Cancer Control, St. Jude Children's Research Hospital, Memphis, TN; [8]Faculty of Kinesiology, University of Calgary, Calgary, CANADA; [9]Department of Oncology, Cumming School of Medicine, University of Calgary, Calgary, CANADA; [10]Division of Psychosocial Resources, AE Child Comprehensive Cancer Centre, Cancer Care, Alberta Health Services, Calgary, CANADA; [11]University of Pittsburgh, UPMC Hillman Cancer Center, Pittsburgh, PA; [12]Department of Sports Sciences. Faculty of Medicine, Health and Sports. Universidad Europea de Madrid, Madrid, SPAIN; and [13]Research Institute of Hospital 12 de Octubre ("imas12"), Madrid, SPAIN

Physical activity vs side-effects





2024 Report



https://www.participaction.com/the-science/key-facts-and-stats/

Objectives

YMCA–PEER Buddy Program

Empowering teens affected by cancer

TOOLS & SUPPORT

Guidance • Knowledge • Relationships • YMCA access

Reduce barriers

COMMUNITY TRANSITION

Buddy-supported → Teen-led

Build independence

SUSTAINABLE PHYSICAL ACTIVITY

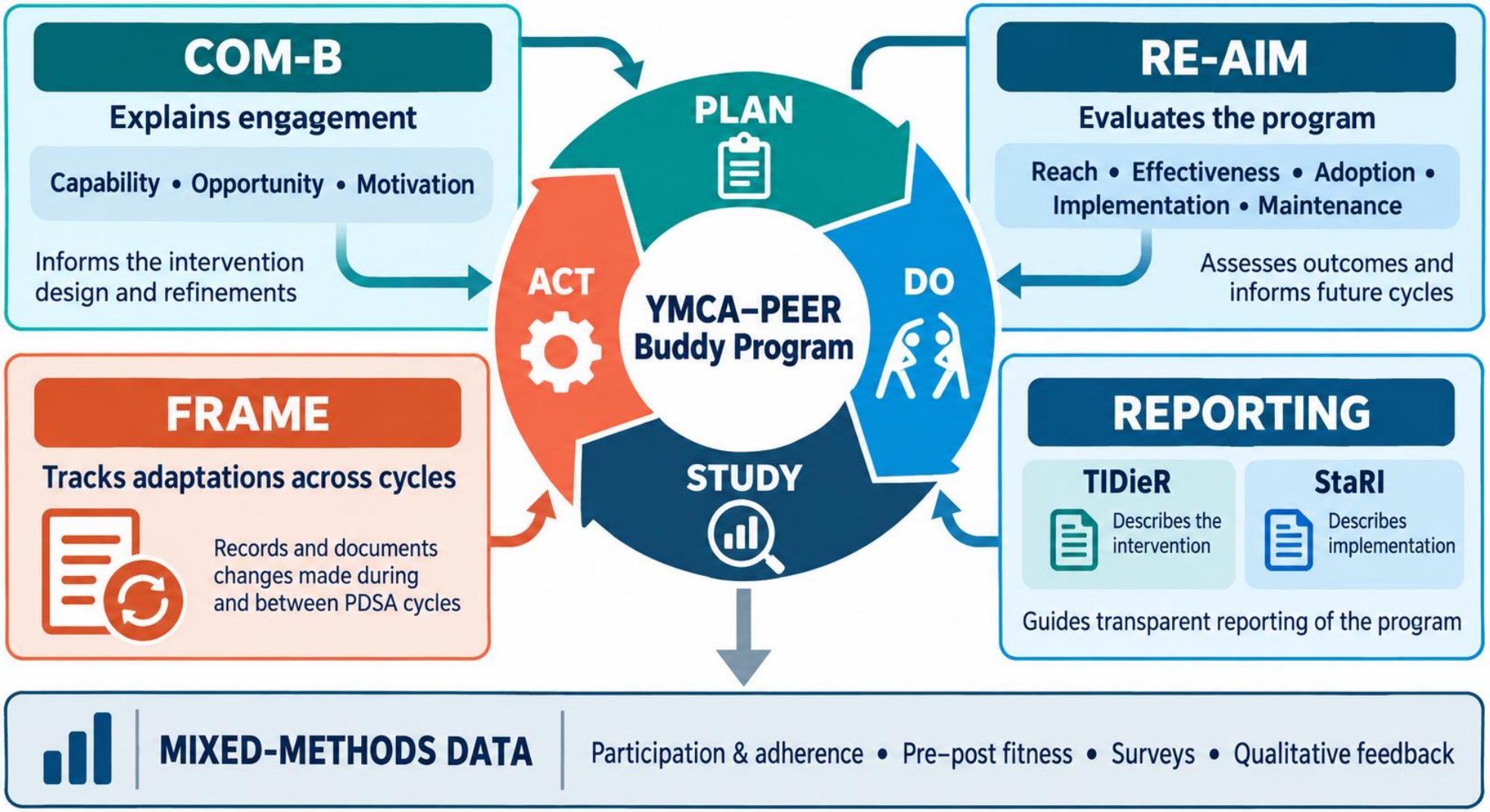
Confident • Independent • Lifelong

Improved physical activity behaviour: Capability • Exercise knowledge • Confidence • Motivation • Social connection • Lifelong healthy habits



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Quality improvement



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Population

- Teen's survivors of cancer and their siblings (12 -17 yr)
- Off treatment
- At the PEER program
- No major side effects that will compromise their PA





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Methods

YMCA–PEER Buddy Program: Participant Journey

From first steps to lasting healthy habits



1 INTAKE & MATCHING

Before Week 1

- Referral and physician clearance
- Consent and YMCA location selected
- Teen matched with a trained volunteer buddy
- Pre-program fitness assessment battery completed

2 BASELINE & ORIENTATION

Week 1

- Individual goal setting
- YMCA and strength-training orientation
- Relationship building

3 SUPPORTED YMCA SESSIONS

Weeks 2–12

- Teen and buddy exercise together weekly
- Individualized activities,skill building and encouragement
- Teen-led program

4 SUPPORTED TRANSITION

Weeks 13–16

- Teen may invite a friend or support person
- Practice exercising with greater independence

5 POST-PROGRAM

Week 17

- Post-assessment and participant feedback
- One-year YMCA teen or family membership
- One YMCA course available

6 FOLLOW-UP & MAINTENANCE

Weeks 19, 22 and 26

- PEER leads or buddies will follow up at Weeks 19, 22, and 26 to provide ongoing support.

Structured support to build skills and confidence

Participant journal guides behaviour-change support

Greater independence for a healthier future

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Study Assessments Overview

	PRE-INTERVENTION (Baseline)	INTERVENTION PERIOD (Weeks 1–17)	POST-INTERVENTION (Week 17)
SATISFACTION SURVEY (Post-Intervention Only)	**Not Assessed** –	**Intervention Delivered** Program participation by teens with support from volunteers and parents	**Assessed** Satisfaction survey completed by: • Volunteers • Parents • Teens (participants)
FITNESS ASSESSMENT (Teens)	**Assessed** • 6-Minute Walk Test • Handheld Dynamometry • 30-Second Sit and Stand • Balance Test • Back Scratch • Sit and Reach • 30-Second Sit and Stand	**Intervention Delivered** Physical activity and health promotion program	**Assessed (Week 17)** • 6-Minute Walk Test • Handheld Dynamometry • 30-Second Sit and Stand • Balance Test • Back Scratch • Sit and Reach • 30-Second Sit and Stand
PARTICIPANT REPORTED OUTCOMES (Teens)	**Assessed** • Peds QL™ QOL • Peds QL™ Multidimensional Fatigue • PROMIS® Relationships • Godin Leisure-Time Questionnaire • Stages of Change	**Intervention Delivered** Behavior change and support strategies	**Assessed (Week 17)** • Peds QL™ QOL • Peds QL™ Multidimensional Fatigue • PROMIS® Relationships • Godin Leisure-Time Questionnaire • Stages of Change

ASSESSMENT TIMEPOINTS SUMMARY

All assessments for teens (fitness and reported outcomes) are completed at two timepoints: Pre-Intervention (Baseline) and Post-Intervention (Week 17).
Satisfaction surveys are completed post-intervention only by volunteers, parents, and teens.

Lessons learned from first cohort



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Participants

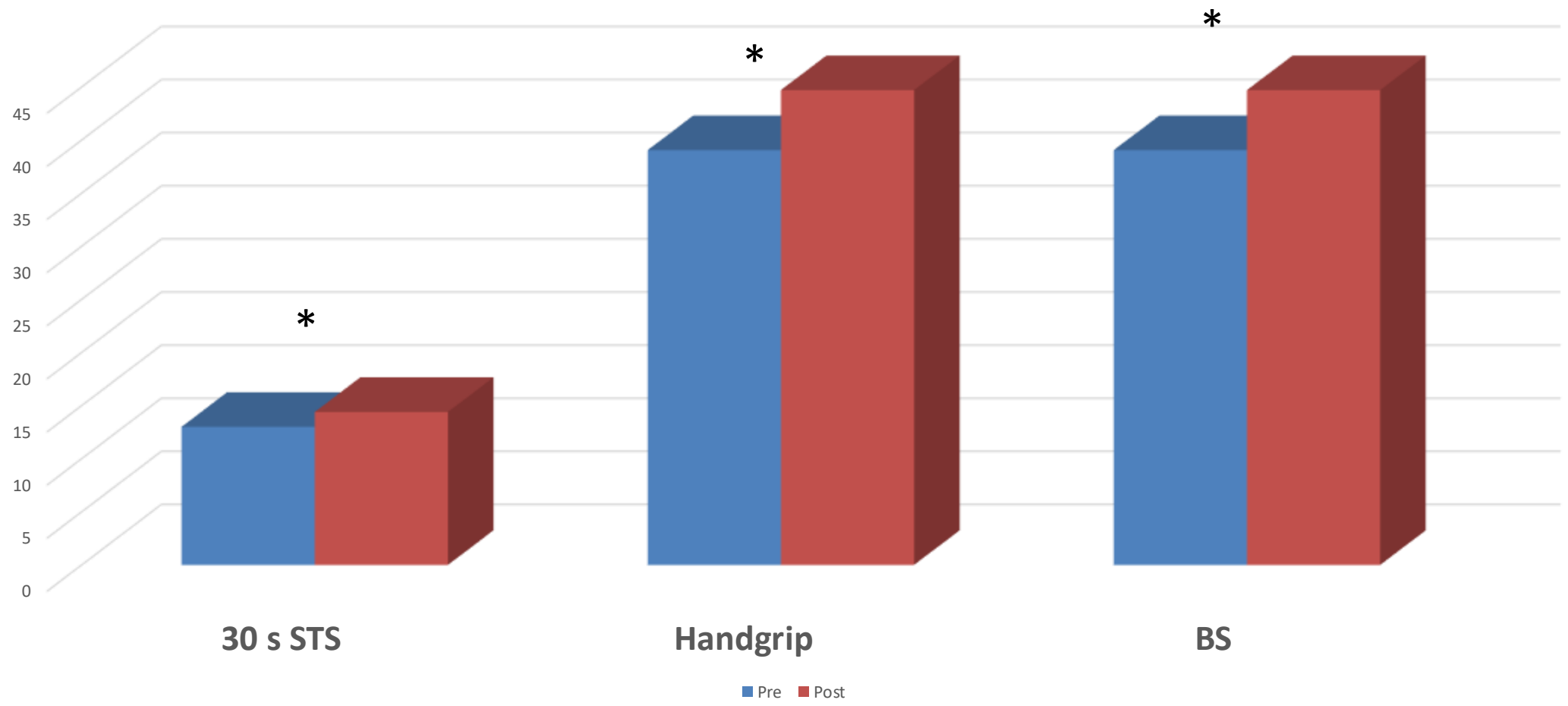
Diagnoses	# of Participants
ALL	4
Retinoblastoma	1
Rhabdomyosarcoma	1
Brain tumor	3
Sibling	1

- **40 % - Obesity**
- **20 % - <3rd percentile height**

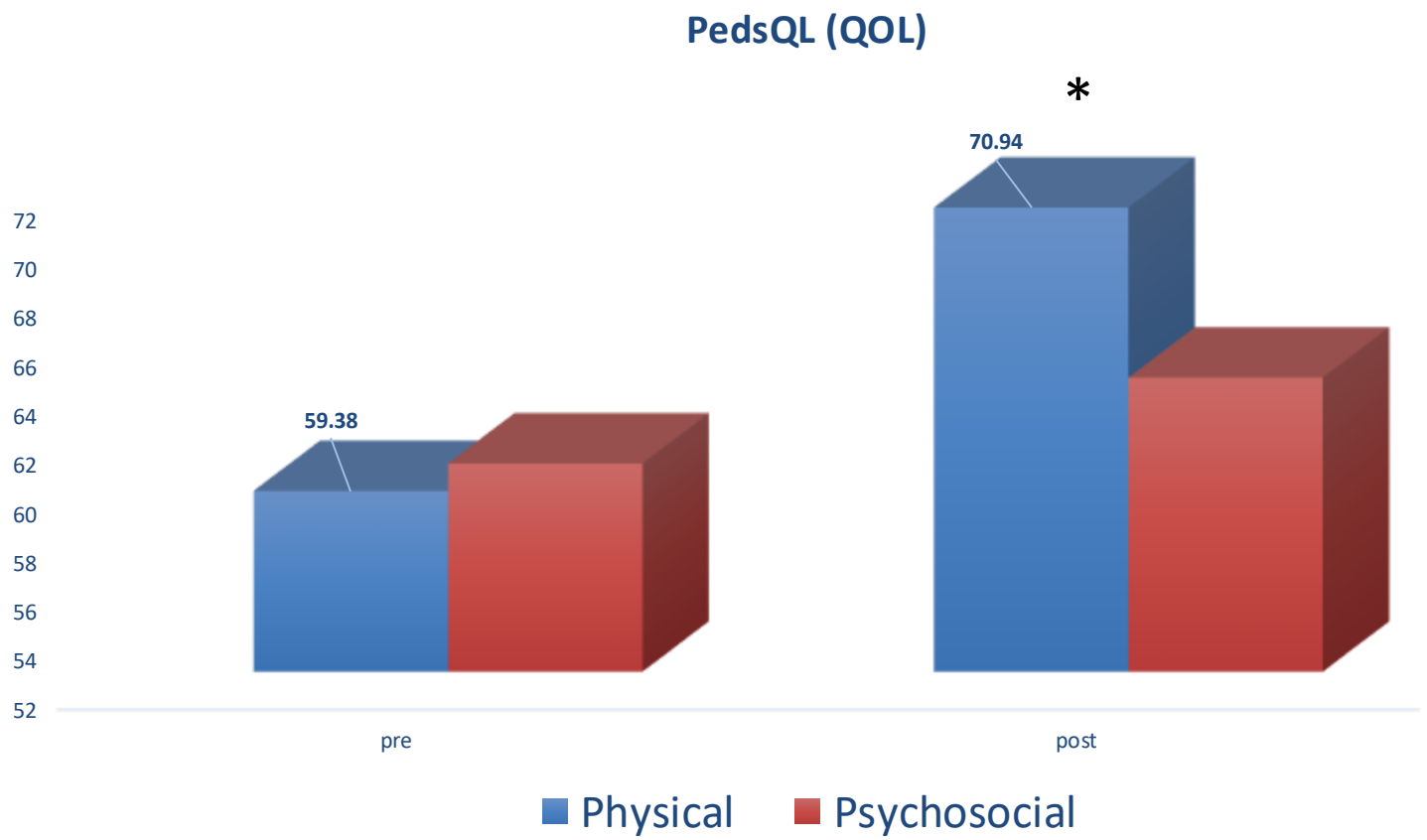
Paired T test	Pre (Mean + SD)	Post (Mean + SD)	Mean Change	P
Height	157.65 ± 13.18 cm	161.03 ± 14.17 cm	2.15%	0.0007*
Weight	59.75 ± 18.69 kg	63.86 ± 20.55 kg	6.48%	0.0012*
BMI	23.58±5.61 kg/m^2	24.07±5.82 kg/m^2	2.01%	0.15

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Fitness test

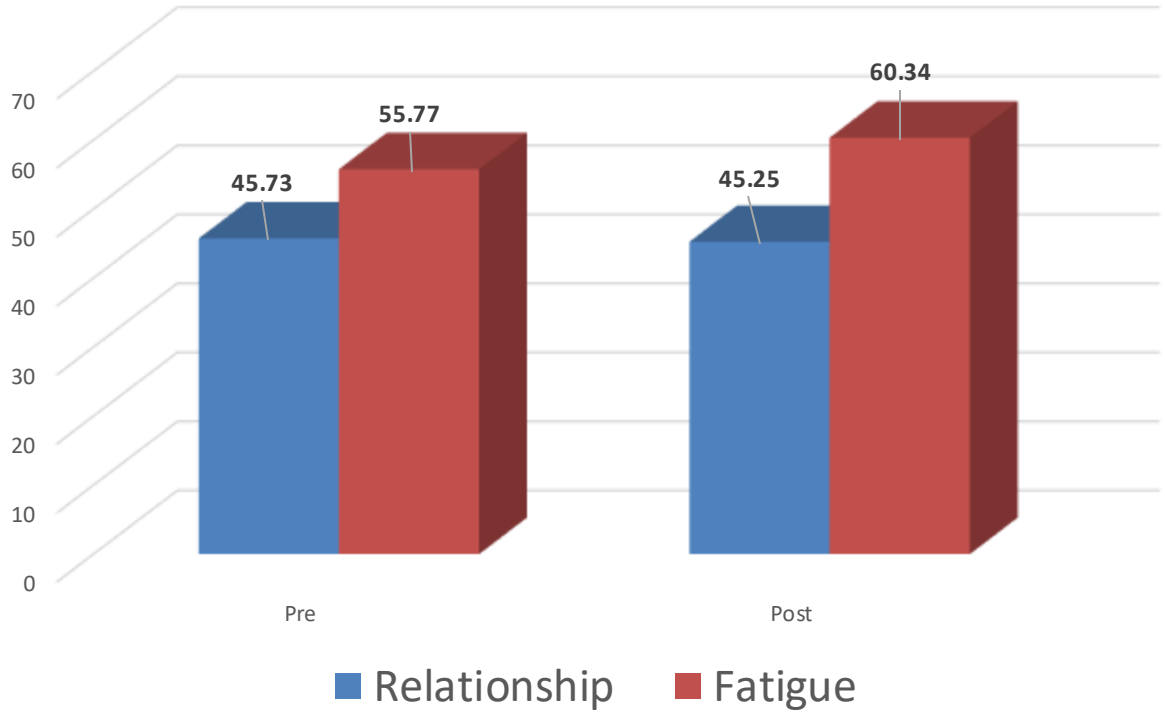


Patient reported outcomes



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Relationships and Fatigue



Interpretation of T-scores Relationship

T-score	Interpretation
≥ 60	Much better peer relationships than average
55–59	Better than average
45–54	Average range
40–44	Somewhat poorer peer relationships
< 40	Significantly poorer peer relationships

Total Fatigue Score	Interpretation
>85	Very low fatigue (better than average)
75–85	Typical healthy range
65–74	Mild fatigue concerns
<65	Clinically meaningful fatigue
<50	Severe fatigue

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NPS (7/10) teens and 10/10 parents

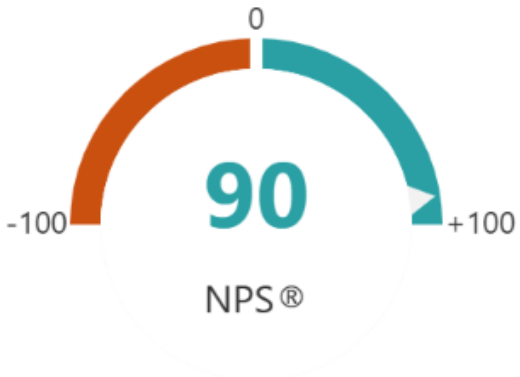
3. **Overall, how satisfied were you with the YMCA–PEER Buddy Program?**

Promoters	7
Passives	0
Detractors	0



16. **How likely are you to recommend the YMCA–PEER Buddy Program to another family?**

Promoters	9
Passives	1
Detractors	0



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What barriers make it difficult for your teen to stay active?



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Parents feedback

Parents Barriers

I’m not sure  but for my self I also lack experience in this environment, so it is intimidating to not have some one to show you what to do . Maybe even encourage you & to ensure also that you don’t over do it or do an exercise wrong .

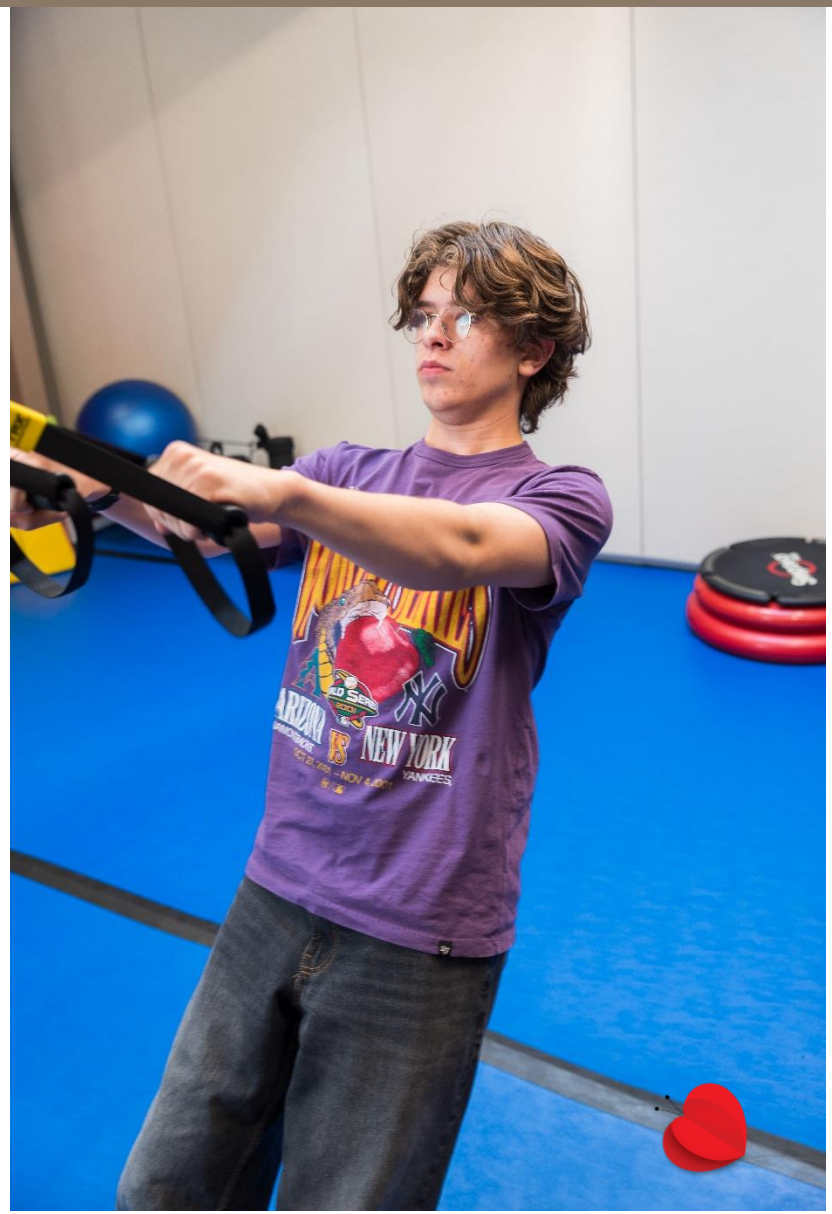
Volunteer feedback

MAIN CONCEPT	SUBCATEGORIES	REPRESENTATIVE QUOTE
1 Preparing volunteers for success	Foundation for the volunteer role Practical support tools	*"I think it would be nice to have some premade workout routines for kids/teens that could be more engaging." P05*
2 Supporting teen engagement and behaviour change	Motivation and goal setting Flexible support to overcome barriers	*"I think the motivation/behavioural change piece was the most challenging for me. There were some sessions when my teen was not feeling motivated." P01*
3 The importance of relationships and support	Meaningful connections with participants Family and program support networks	*"Again I think the program is fantastic! A huge part for me was the connection and shared interests I shared with my buddy, I believe that this matching was perfect and was a huge part of my motivation/enjoyment!" P07*
4 Mutual benefits and sustained impact	Teen progress and confidence Volunteer personal and professional growth	*"I also got back into swimming because this was an activity my teen wanted to try. I think this program also helped me to work on my motivational skills." P01*

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Improvements for the next cohort

- Journal to support behavior change
- Training behavioral coaching by Health and Thrive
- Involve the family in the 16 weeks program
- Build awareness of PEER across YMCA branches
- Try to improve creation of social support network (teens/YMCA)



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THANK YOU

All families and teens that participated with enthusiasm

All the amazing volunteer that put the program in action: Jolin Che, Sam Finley, Amanat Panech, Jewel Balmer, Sam McIntosh, Tulsi Gupta, Armaan Kaur, Olivia Dixon, James Foster .

All the team that helps train the volunteer: Dr. Culos-Reed and the Health and Wellness Lab, Dr. Fiona Schulte and the CARE4KidsLab and Dr. Aru Narendran, Kylie Bradbury.

Thrive Health Services: directed by Dr. Culos-Reed, that also provide asynchrony online training for our volunteers

Supporters & partners: Calgary Flames Foundation, RBC, YMCA (especially to Brigitte Edwards and Randi Basi at Rocky Ridge branch)

MRU capstones students and Carolyn Bjarvet, PhD for the support creating the PEER buddy program journal and guide for volunteers.

Dr. Emma McLaughin, Dr. Manuel Ester, Jolie Che and Amna Amir for the help analyzing results writing manuscripts and manuals.

Children Birthday Miracle for providing all the FITBIT

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UNIVERSITY OF CALGARY
FACULTY OF KINESIOLOGY
Health and Wellness Lab

Foundation

Shine On

RBC

CBM Children's Birthday Miracles

Thrive HEALTH

Thank you!



PEER
PEDIATRIC CANCER PATIENTS & SURVIVORS ENGAGING IN EXERCISE FOR RECOVERY

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Carolina Chamorro-Viña
cchamorro@kidscancercare.ab.ca