

Background

- The World Health Organization (WHO) recognizes that physical activity (PA) can delay, manage, and prevent disease, while improving the quality of life of children^{1,2}
- 81% of adolescents worldwide fail to meet the WHO's recommendation of 60 mins/day of moderate-to-vigorous PA (MVPA), including adolescents with chronic conditions¹

Objectives

To understand the importance of creating condition-specific PA recommendations (CSPRs), this study:

- 1) Explored existing CSPRs in the literature
- 2) Compared MOMENTUM self-reported PA with CSPRs
- 3) Identified opportunities for personalized exercise plans (PEPs)

Methods

- Light, moderate, and vigorous PA data was collected through the MOMENTUM Study from 12- to 17-year-old children diagnosed with the following chronic medical conditions for ≥ 1 year: juvenile idiopathic arthritis (JIA), type 1 diabetes (T1D), inflammatory bowel disease (IBD), chronic kidney disease (CKD), and/or cystic fibrosis (CF)
- Review studies from Pubmed, OVID, and Web of Science that explored current CSPRs were included

Results

- CSPRs in the literature are highly inconsistent with general PA recommendations from the WHO^{2,3,4,5,6,7,8}
- Preliminary findings indicate underactive IBD children

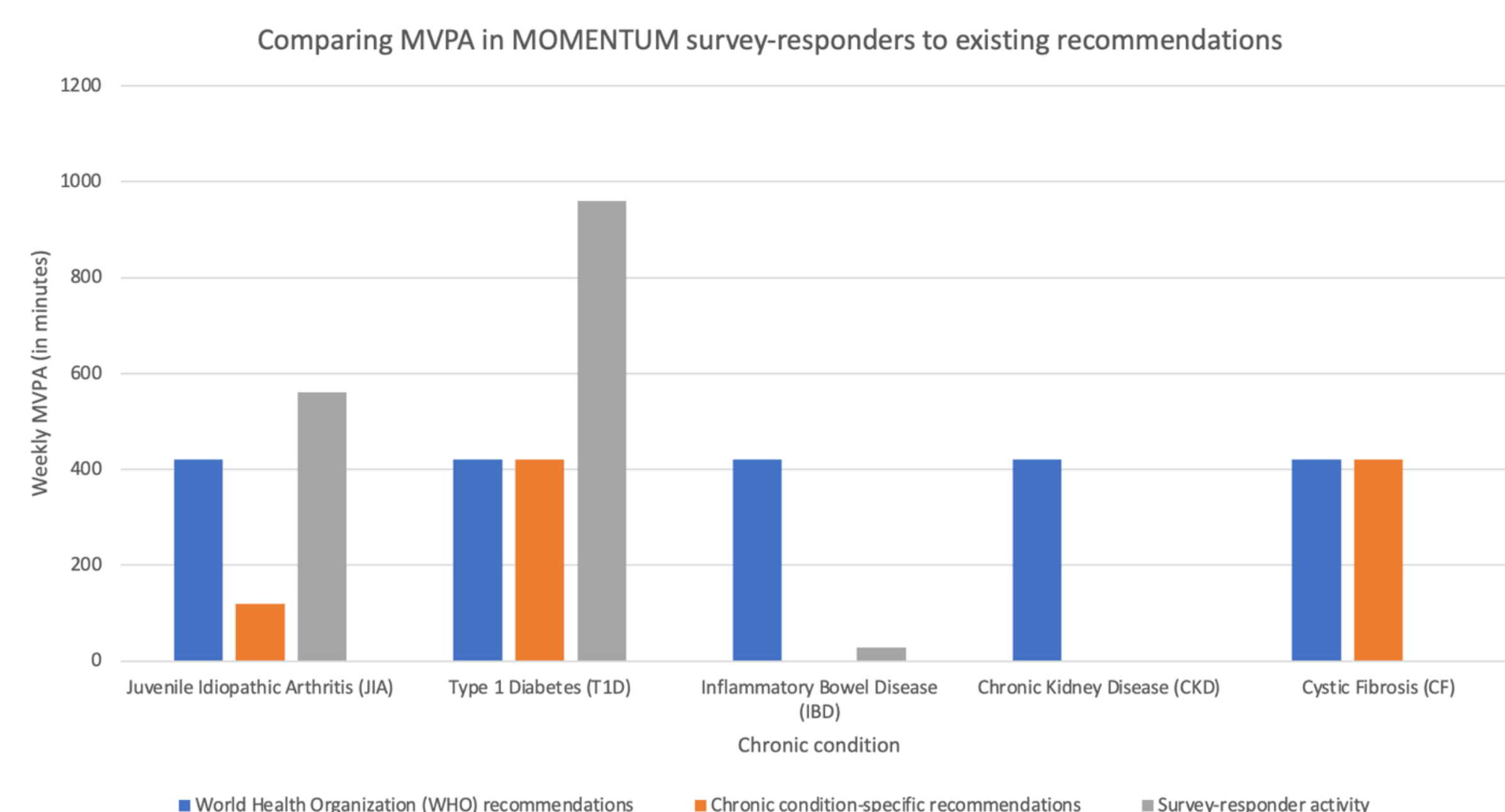
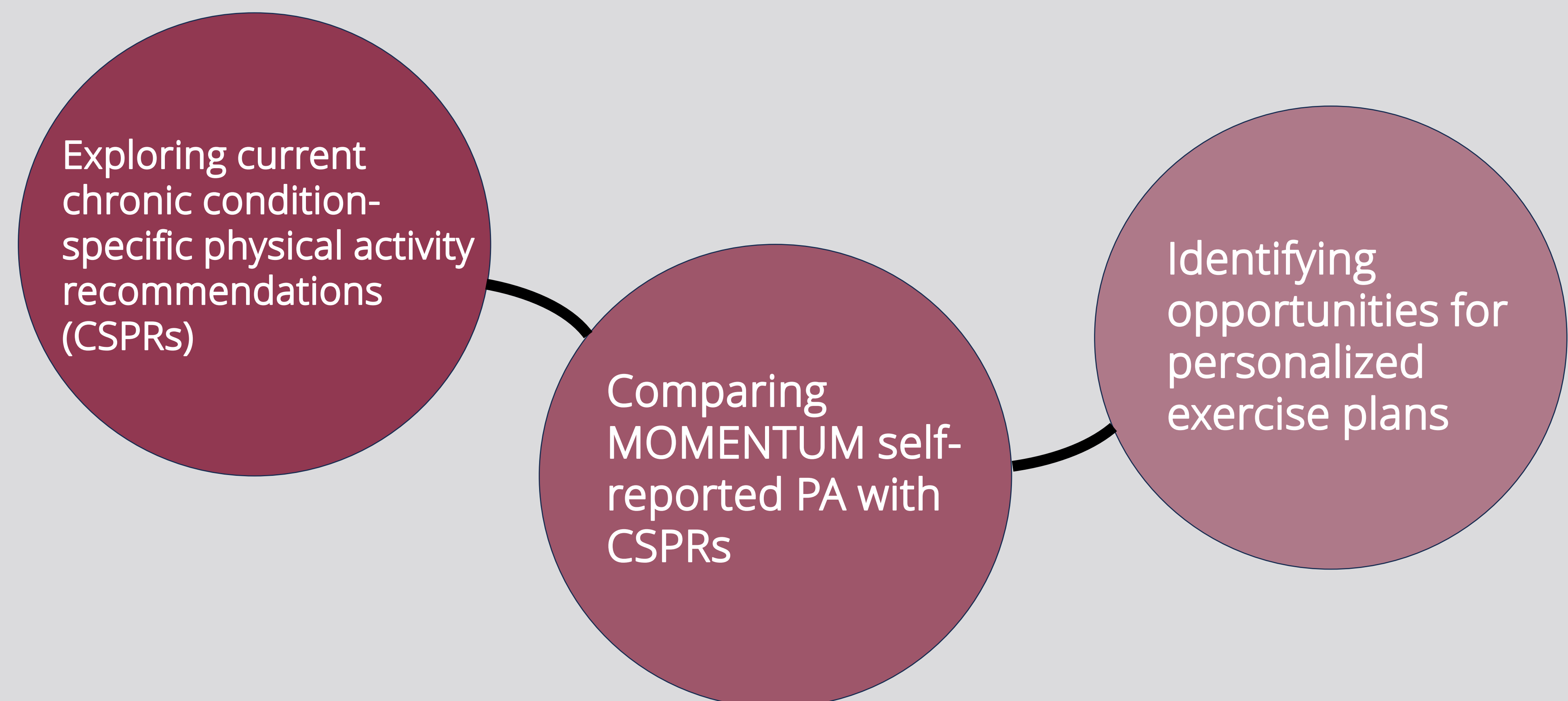


Figure 1: Bar graph illustrating the self-reported weekly MVPA levels from MOMENTUM survey data, and weekly MVPA recommendations, for all 5 chronic conditions of interest

Kids with chronic conditions are **not** meeting current physical activity guidelines, and could benefit from **condition-specific personalized exercise plans**



Discussion

- Potential limitations include participant misreporting of PA duration and intensities, and varying sample sizes of children with each chronic condition
- Establishing relationships between survey-data and CSPRs can reveal opportunities for PEPs to improve PA accessibility, adherence, and condition symptoms

References

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