



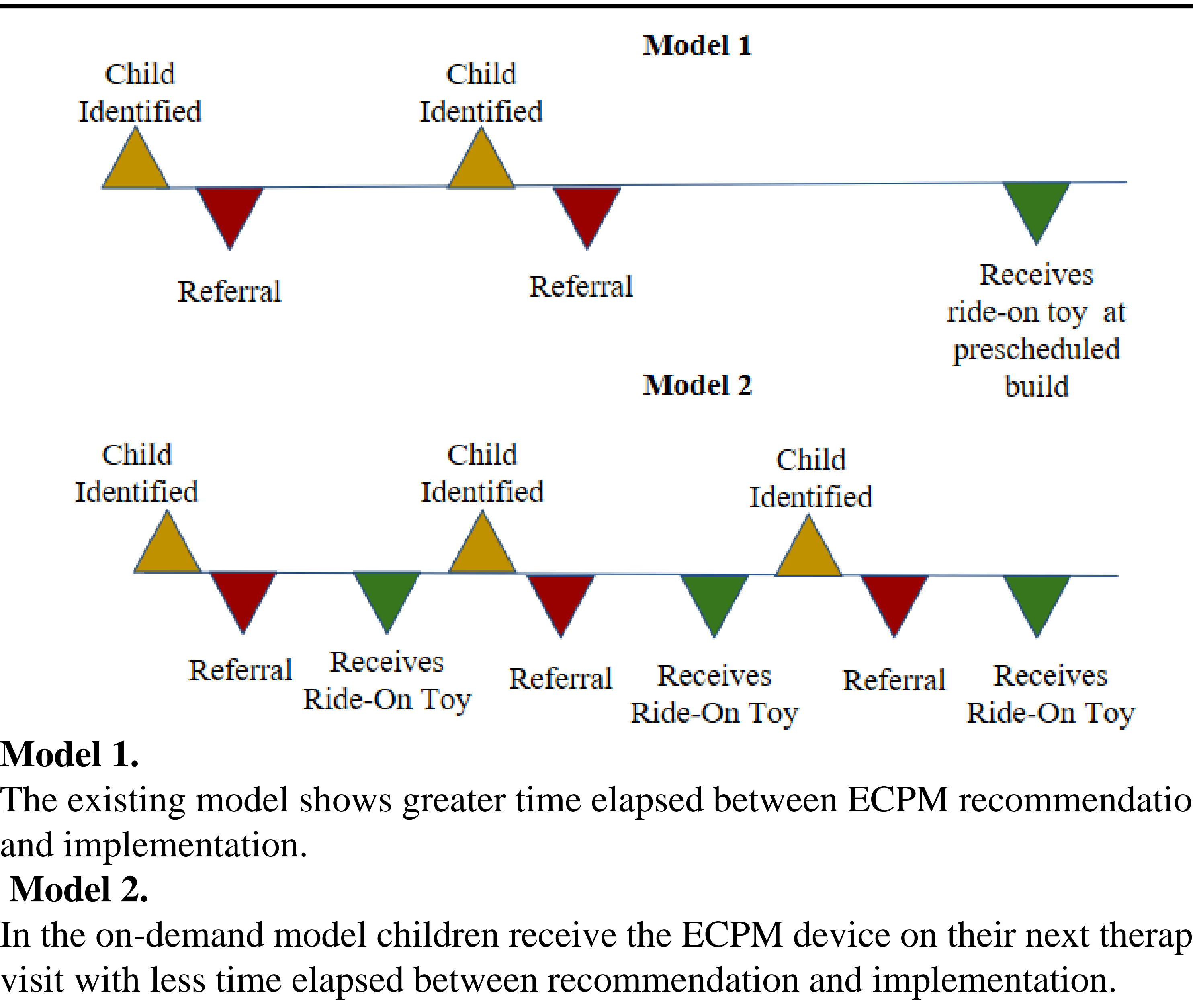
Background and Purpose

Background

- Early childhood power mobility (ECPM) helps children with neuromuscular and orthopedic conditions improve mobility and attain developmental milestones (Henderson, Skelton, & Rosenbaum, 2008).
- The standard GoBabyGo model calls for scheduled car "build" events that occur several times yearly, introducing a gap between child identification and ECPM provision.
- Significant gaps may mean missing developmentally sensitive periods, mitigating the benefits of the ECPM device.

Purpose

- Establish a time sensitive model of GoBabyGo to minimize the impact of developmental differences between time of ECPM recommendation and provision.



Assessments

Construct	Assessment(s)
ROM	Goniometry
Spasticity	Modified Ashworth
Function & QOL	Pediatric Evaluation of Disability Inventory (PEDI)
Trunk Control	Segmental Assessment of Trunk Control
Selective Motor Control	Selective Control Assessment of the Lower Extremity (SCALE) Quality of Upper Extremity Skills Test (QUEST)
Parental Stress	Parenting Stress Index (PSI-4-SF)



Methods

Sample

- 18 Children, 18 months-6 years old, who were identified by therapists as candidates for ECPM due to mobility impairments.

Design

- Prospective cohort study
- After therapist screenings, the students will perform a supervised evaluation and make baseline car modifications. During the next therapy visit, the ECPM device will be finalized to meet the child's individual needs.
- The process described above will span over about one week.
- 6-month follow-up

Outcomes

- Proposed feasibility of this on-demand ECPM delivery model
- Secondary data will be reported regarding intervention efficacy

Statistical Method

- Changes in ratio data will be compared via between-groups ANOVA.
- Ordinal data (i.e., all remaining assessments) will be compared via the non-parametric alternative, Kruskal Wallis Test.

Results

- We predict that the on-demand GoBabyGo model will be both feasible and beneficial for child development.

Discussion and Conclusion

- The primary barrier to implementation was coordination of varying schedules. Barrier was overcome by:
 - Providing release time schedules for therapists
 - Student roster to complete evaluations and modifications
 - Implementing a plan to ensure institutional memory
- Because the on-demand model puts children in cars faster than the traditional model, we propose that the benefits justify the costs.

References

See link for references: <http://bit.ly/GoBabyGoReferences>