

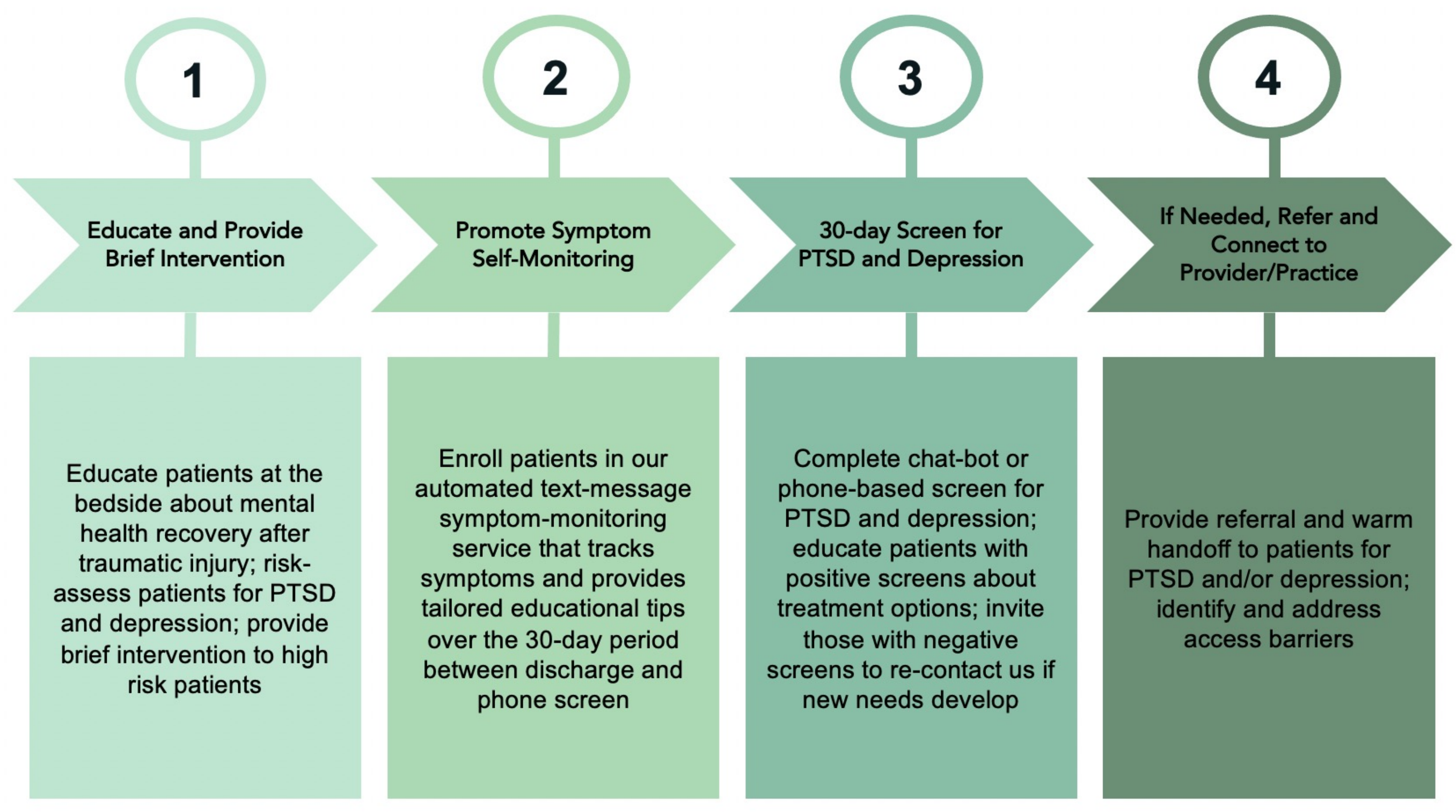
# Improving Access, Equity, and Quality of Mental Health Care among Children Affected by Traumatic Injury

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## Introduction

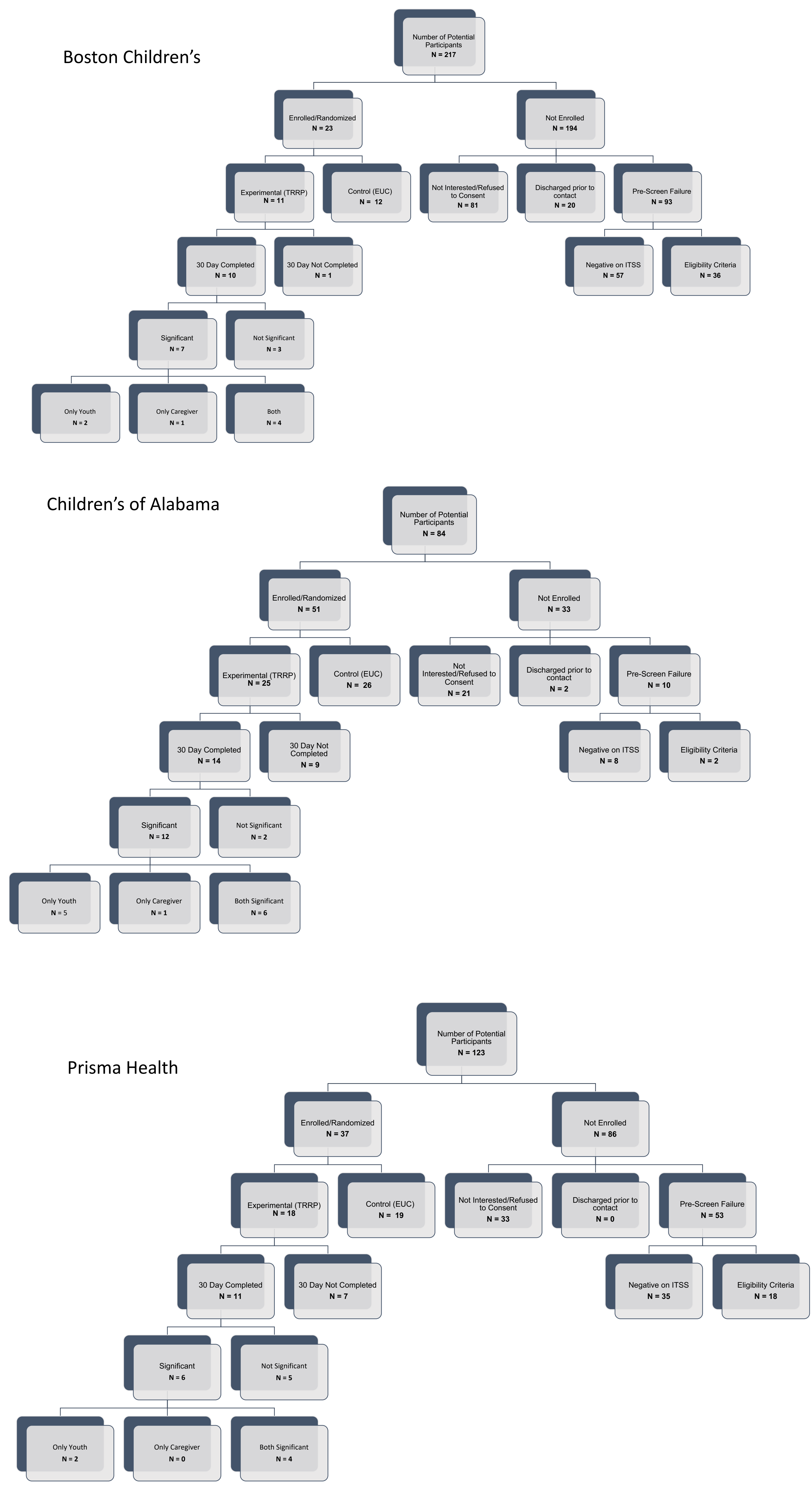
- Roughly 300,000 children incur injuries so severe they require hospitalization.
- Traumatic injury is associated with mental health and health risk outcomes, including posttraumatic stress, depression and deficits in physical recovery.
- Racial/ethnic minorities and violent injury survivors are at increased risk for developing mental health disorders and face several barriers to service use.
- American College of Surgeons guidelines mandate addressing emotional recovery in traumatic injury patients.
- The Trauma Resilience and Recovery Program (TRRP) is a stepped-care, technology-enhanced model of care that addresses the mental health needs of hospitalized traumatically injured patients.
- Our team partnered with three Level I and II pediatric trauma centers to conduct a multi-site hybrid 1 effectiveness-implementation trial with 300 teens (ages 12-17) to assess whether TRRP promotes improvement in emotional recovery.



## Methods

		Boston Children's (mean age = 14) N %	Children's of Alabama (mean age = 14) N %	Prisma Health Upstate (mean age = 15) N %
<b>Gender</b>	Male	13 (56.5%)	30 (58.8%)	19 (51%)
	Female	10 (43.4%)	21 (41%)	18 (48.6%)
<b>Race</b>	Black	4 (17.3%)	23 (45%)	10 (27%)
	White	16 (69.5%)	28 (55%)	26 (70%)
	Other	3 (13%)	0	1 (2.7%)
<b>Ethnicity</b>	Hispanic	3 (13%)	2 (4%)	1 (2.7%)
	Non-Hispanic	20 (87%)	49 (96%)	36 (97.3%)
<b>Injury Type</b>	MVC	5 (21.7%)	12 (23.5%)	20 (54%)
	Ped vs Auto	3 (13%)	1 (1.96%)	0
	ATV/4-Wheeler	1 (4%)	10 (19.6%)	3 (8%)
	Violent Injury	2 (8.69%)	15 (29.4%)	0
	Sports	5 (21.7%)	2 (3.9%)	1 (2.7%)

## Enrollment and Engagement



## Results

- Older children, boys, and GSW and sports injuries were less likely to enroll
- Enrollment rates were significantly lower at Boston Children's compared to the other two sites, primarily due to pre-screen failures (e.g., non-English speaking) and lack of interest in participation (e.g., sports injuries)
- For those in the TRRP condition, those female (51%) 15 years old (33%), MVC (28.8%) were less likely to engage (i.e., respond at least once) with SMS
- For those in the TRRP condition, those 15 years old (26%), white (79%), MVC (42%) were less likely to complete the 30-day screen
- At 3 month follow up, each site had similar retention rates – Alabama 58%, Boston 67% and Prisma 68%.
- At 6 month follow-up, Alabama drops significantly (43%) compared to Boston (73%) and Prisma (74%).
- The decline continues at 12 month point with only 7% of follow up surveys completed at Alabama, 33% at Boston and 53% at Prisma.

## Lessons Learned

- Older teenage boys, with violent injuries or sports injuries were less likely to enroll.
- Most common reason for not enrolling was report of not experiencing struggles with mental health or emotional issues.
- Modifications to the study enrollment protocol were made to emphasize that study would still be helpful in determining ways to best help those who are hospitalized for traumatic injury
- The decline in completion of follow up could be in part the fact that Violent Injuries make up 25% of enrolled patients at the Alabama site, compared to Boston (8%) and Prisma (0%).