



# Comparison of TAY Triage Tool (TTT) and Next Steps Tool (NST)

Commissioned by Children's Hospital Los Angeles  
Prepared by Focus Strategies

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## Comparison of TAY Triage Tool (TTT) and Next Steps Tool (NST)

The Hollywood Homeless Youth Partnership Agencies (HHYP) launched a Youth Coordinated Entry System (CES) pilot in November 2015 to better meet the needs of youth and young adults experiencing homelessness in Los Angeles County. Focus Strategies was engaged to conduct a process and outcome evaluation of the pilot. One central aspect of the Pilot is the use of the Next Steps Tool (NST) as the primary assessment and prioritization method. Throughout the Youth CES pilot some partners have expressed concerns about this tool. The NST tool includes 17 questions and takes between 15 and 60 minutes to administer. Concerns expressed include the length of the tool, whether it adequately captures vulnerability (especially on issues of mental health and substance abuse), whether the distinctions between scores, especially along the cut off margins, are meaningful, and whether the personal nature of some of the questions is re-traumatizing. [We note that youth we spoke with in focus groups as a whole expressed less concern about the length and nature of questions, though a few mentioned that some subjects were very personal or that they chose not answer things.]

The Pilot leadership is interested in understanding the relationship between the NST and the TTT to help inform prioritization into housing resources. This report provides a comparison of the results of the NST Tool with the potential results of using a different tool, the TAY Triage Tool. With work based on data gathered during an NIMH-funded survey of 646 homeless youth recruited from drop in centers in Los Angeles in 2011 and 2012, Dr. Eric Rice developed the TAY Triage Tool (TTT) for prioritizing transition age youth 18-24 for supportive housing.<sup>1</sup> The work began because of an interest in the prevention of long-term, chronic homelessness, and therefore set about to identify factors associated with vulnerability to long-term homelessness. His interest was in trying to specify variables that precede long-term homelessness rather than identifying factors that, while they may be related to higher likelihood of long-term homelessness, may also result from a youth's experience of being homeless. One clear example is the difference between asking about current alcohol and drug use instead of asking about very early experience (i.e., before the experience of homelessness) with alcohol and drug use.

In developing the TTT, Rice found that with six relatively non-invasive questions, the most highly vulnerable youth could be identified. Specifically, youth who "endorsed" (that is agreed with or said yes to) four, five, or six of the items were much more likely to: have been in foster care, become a parent, have used methamphetamines and marijuana, be depressed, exhibit symptoms of PTSD, and not have earned a high school diploma or GED. Further, all six items included in the TTT significantly differentiated youth who had experienced five or more years of homelessness from those who had experienced less than five years.

Because the questions in the TTT are also used (with slightly variant wording) within the NST, the Youth CES Pilot provided an opportunity to conduct exploratory analyses addressing whether the TTT potentially offers screening information that may be just as, or more, useful than the NST.

The NST tool includes 17 questions and takes between 15 and 60 minutes to administer. The six TTT items comprise a subset of items included in the NST, although the NST items are not worded exactly as originally developed and tested in the TTT. Table 1 presents the six TTT items and compares them to the six comparable items in the NST.

<sup>1</sup> Rice, E. (2013). The TAY Triage Tool: A Tool to Identify Homeless Transition Age Youth Most in Need of Permanent Supportive Housing.

Table 1: Comparable TAY Triage Tool and Next Step Tool Items

TAY Triage Tool	Next Step Tool
Have you ever become homeless because: I ran away from my family home, group home, or foster home?	Is your current lack of stable housing because you ran away?
Have you ever become homeless because: there was violence at home between family members?	Is your current lack of stable housing because of violence at home between family members?
Have you ever become homeless because: I had differences in religious beliefs with parents/guardians/caregivers?	Is your current lack of stable housing because of a difference in religious or cultural beliefs from your parents?
How old were you when you tried marijuana for the first time?	If you've ever used marijuana, did you ever try it at age 12 or younger?
Before your 18 <sup>th</sup> birthday, did you spend any time in jail or detention?	Were you ever incarcerated when younger than age 18?
Have you ever been pregnant or got someone else pregnant?	Are you currently pregnant, have you ever been pregnant, or have you ever gotten someone pregnant?

The wording changes in the first three items may impact responses elicited from youth; “have you ever become homeless because...” suggests a more global and encompassing point of reference than “is your current lack of stable housing because....” Youth who have experienced homelessness on more than one occasion are likely to respond about the most recent episode, rather than taking the longer-term perspective suggested by “ever.” Moreover, the change in wording from “homeless” to “current lack of stable housing” likely also has an impact on responses provided. These changes are important in interpreting the analyses described below because results presented here may not reflect what would be found with the original six TTT items.

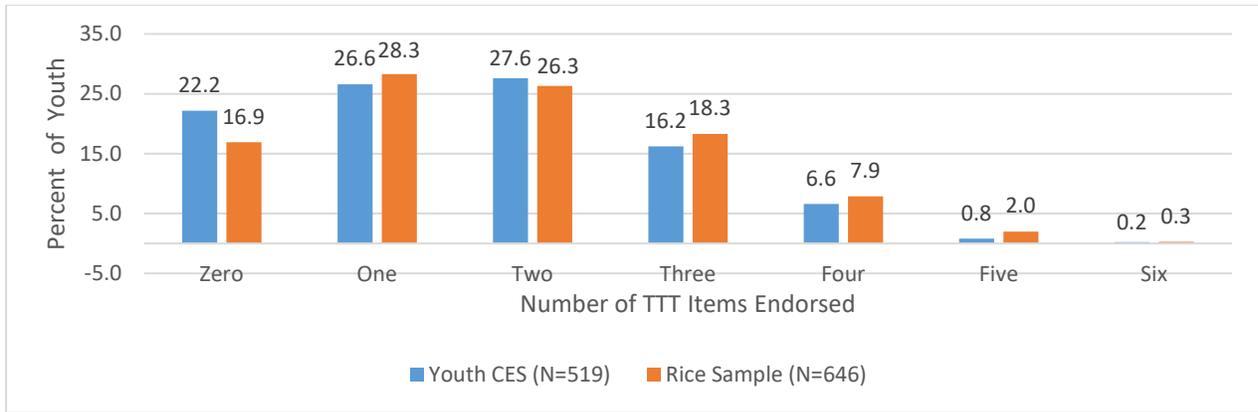
For the sake of comparison, we refer to the score on the TTT derived from the answers to the corresponding questions in the NST tool as the “derived TTT score.”

Figure 1 illustrates the distribution of derived TTT scores for the 519 youth, as well as the distribution of scores Rice found in the sample of 646 homeless youth. The distribution of scores of youth in the Pilot is similarly shaped but shifted to the left, with more youth endorsing zero items than in the sample of homeless youth Rice worked with. In Rice’s sample, a slightly higher percent of youth endorsed three, four, and five items than the Pilot youth did. The shifted distribution may well be a result of the changed wording, and impacts the absolute number of youth who would be prioritized. Using a cut-off of four for prioritization yields 39 Pilot youth, while a cut-off of three yields 122. The next set of analyses, therefore, explore the relationship between prioritization using a three- or four-point cut-off on the derived TTT score and demographic and homeless history characteristics.

Like the full NST, prioritization with the derived TTT score was associated only with age, and then, only with the more stringent cut-off score of four. Results showed that those who scored four or more on the derived TTT were significantly older (average 23.1 years) than those scoring below four (average 21.9;  $F(1, 515) = 16.3, p < .001$ ). No other demographic characteristics were associated with being prioritized on the TTT.<sup>2</sup>

<sup>2</sup> Score of four: Gender ( $X^2(2) = .44, ns$ ), Race ( $X^2(2) = .07, ns$ ), and Ethnicity ( $X^2(1) = .9, ns$ ); Score of three: Age ( $F(1, 515) = 2.2, ns$ ), Gender ( $X^2(2) = .3, ns$ ), Race ( $X^2(2) = .4, ns$ ), and Ethnicity ( $X^2(1) = 1.7, ns$ ).

Figure 1: Distribution of Number of TTT Items Endorsed by Youth



Homeless history characteristics also differentiated those that would be prioritized with either the four – or three-point cut off, showing similar patterns as those found with the NST. Figure 2 and Table 2 present the distributions of youth prioritized using both cut off scores. Specifically, Figure 2 illustrates that those prioritized were more likely to sleep most frequently outside or couch surf, and those not prioritized were more likely to have slept in shelter (4 point  $X^2(4) = 12.5, p < .05$ ; 3 point  $X^2(4) = 25.1, p < .001$ ). Likewise, Table 2 shows that those prioritized with the derived TTT score reported a longer time since stable housing (four point  $F(1, 510) = 7.1, p < .01$ ; three point  $F(1, 510) = 5.3, p < .05$ ), as well as more times homeless over the previous three years (four point  $F(1, 516) = 31.2, p < .001$ ; three point  $F(1, 516) = 17.0, p < .001$ ).

Figure 2: Derived TTT Prioritization is Related to Where Youth Most Frequently Sleep

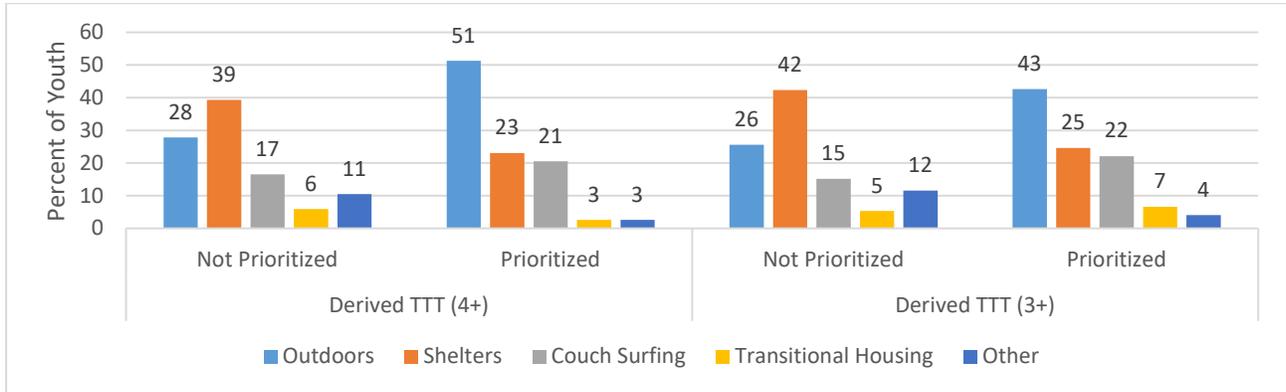


Table 2: Homeless History Characteristics of Youth Prioritized Using Different Cut-Offs for the Derived TTT

	Derived TTT (4+)		Derived TTT (3+)	
	Not Prioritized Avg	Prioritized Avg	Not Prioritized Avg	Prioritized Avg
Times Homeless Last Three Years	3.4	8.5	3.2	5.5
Months Since Stable Housing	22.3	36.1	21.6	28.9

## NST and Derived TTT: Who Gets Prioritized?

Tables 3 and 4 show the distribution of youth as they are prioritized by the NST, as compared to the derived TTT, using both cut off scores. Associations between how both tools prioritize are statistically very strong (4 point  $X^2(2) = 58.0, p < .001$ ; 3 point  $X^2(2) = 105.1, p < .001$ ), although the practical implications are substantively different. Specifically, prioritizing with either version of the derived TTT results in smaller population identified for prioritization for the highest-level resources than the NST does. With a cut-off at 4 points the derived TTT identifies 39 youth recommended for supportive housing compared to 197 in the NST tool recommended for longer-term housing resources. With a cut-off at 3 points the derived TTT group grows to 123, still much smaller than the NST group. On the other hand, because the NST score ranges from 0 to 17, it affords more refinement for targeting within the group of youth prioritized than the derived TTT score which ranges from 0 to 6.

*Table 3: NST Service Level Recommendation vs. Derived TTT (4+) Prioritization Recommendation*

		Next Step Tool (N=519)			
		Diversion	Shorter Term	Longer Term	TOTAL
Derived TAY Triage Tool (N=519)	Not Prioritized	67	253	160	<b>480</b>
	Prioritized	0	2	<b>37</b>	<b>39</b>
	TOTAL	<b>67</b>	<b>255</b>	<b>197</b>	<b>519</b>

*Table 4: NST Service Level Recommendation vs. Derived TTT (3+) Prioritization Recommendation*

		Next Step Tool (N=519)			
		Diversion	Shorter Term	Longer Term	TOTAL
Derived TAY Triage Tool (N=519)	Not Prioritized	67	226	103	<b>396</b>
	Prioritized	0	39	<b>94</b>	<b>123</b>
	TOTAL	<b>67</b>	<b>255</b>	<b>197</b>	<b>519</b>

Figures 3 and 4 use the cells highlighted in the Tables above and illustrate the relationships between youth prioritized by each approach; they represent the intersections (or overlap) of youth prioritized by the NST and those prioritized by the derived TTT (4+) and TTT (3+). It is evident that the youth identified by the derived TTT (4+) are essentially (although not entirely) a subset of youth identified by the NST. There is less, but still substantial, overlap of youth who are identified by the derived TTT (3+) and the NST.

Depending on the system's goal (e.g. having a smaller prioritized population because of scarce resources vs. having more choice within the targeted population for referral to housing), each approach provides benefit. Below we investigate the similarities and differences between the different approaches in more detail.

Figure 3: Overlap of NST and Derived TTT (4+) Prioritization

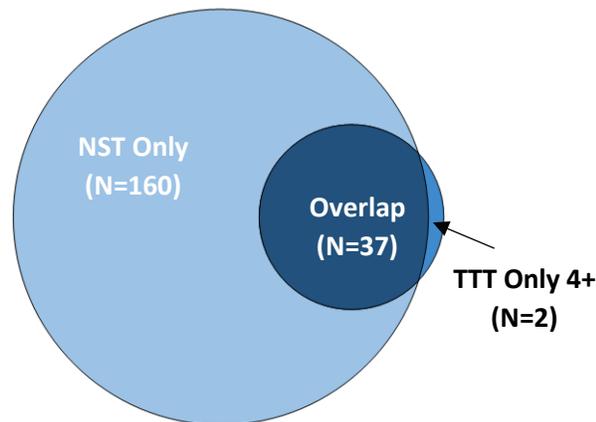
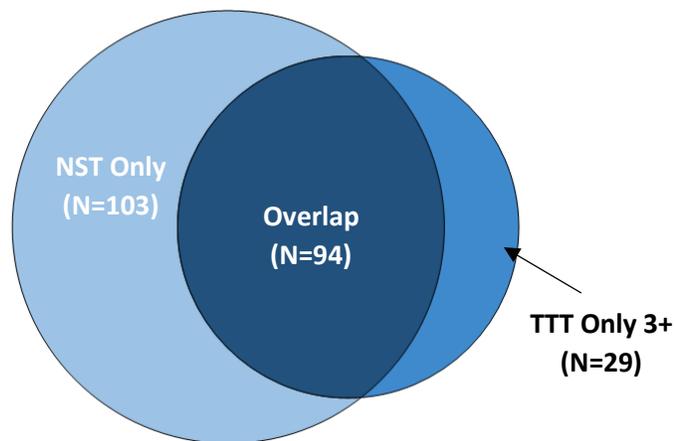


Figure 4: Overlap of NST and Derived TTT (3+) Prioritization



A series of analyses explored the homeless characteristics of youth considered to be the highest priority using the NST (N=197), the TTT with the four-point cut off (N=39), or the TTT with the three-point cut off (N=123). The distributions illustrated in Figures 5 and 6 below indicate that youth prioritized with the TTT and a cut-off of four are consistently more likely to be sleeping outside, have more time since having been in stable housing, and have experienced more times homeless over the last three years. All approaches, however, result in a population of youth who are more likely to have slept outside and couch surfed, and are less likely to have slept in shelter. Further, all prioritized youth have longer lengths of time since living in stable housing, and have experienced more times homeless over the last three years, although those prioritized using the derived TTT (4+) appear to be the highest of the high-need youth.

Figure 5: Distribution of Most Frequent Sleeping Situation by Prioritization Approach

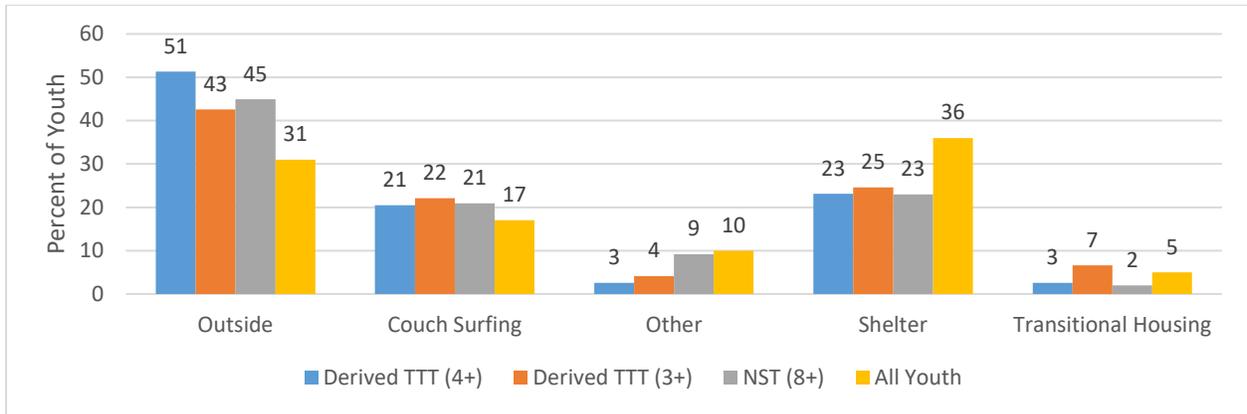


Figure 6: Distribution of Homeless History Characteristics by Prioritization Approach

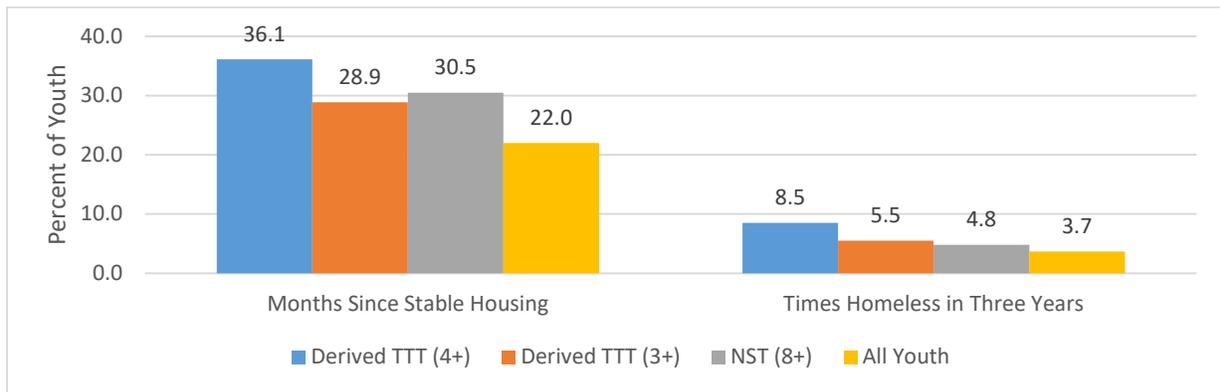
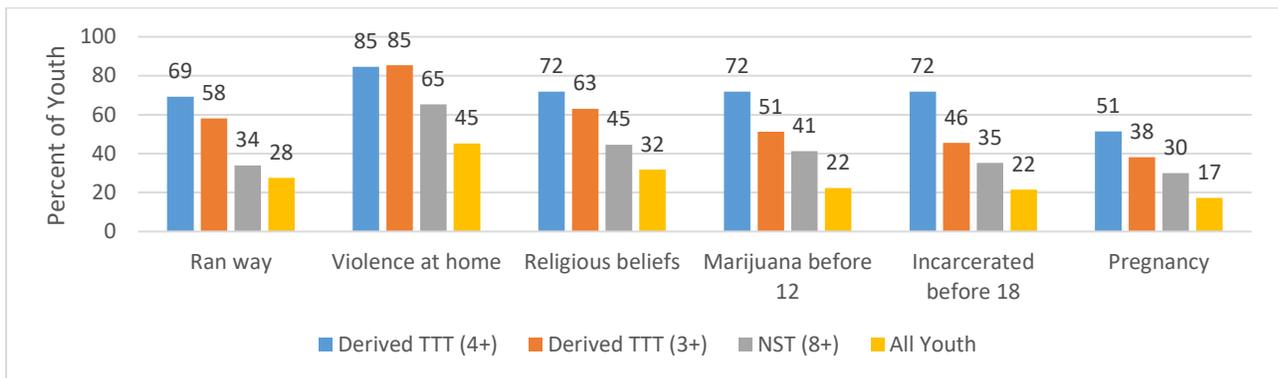


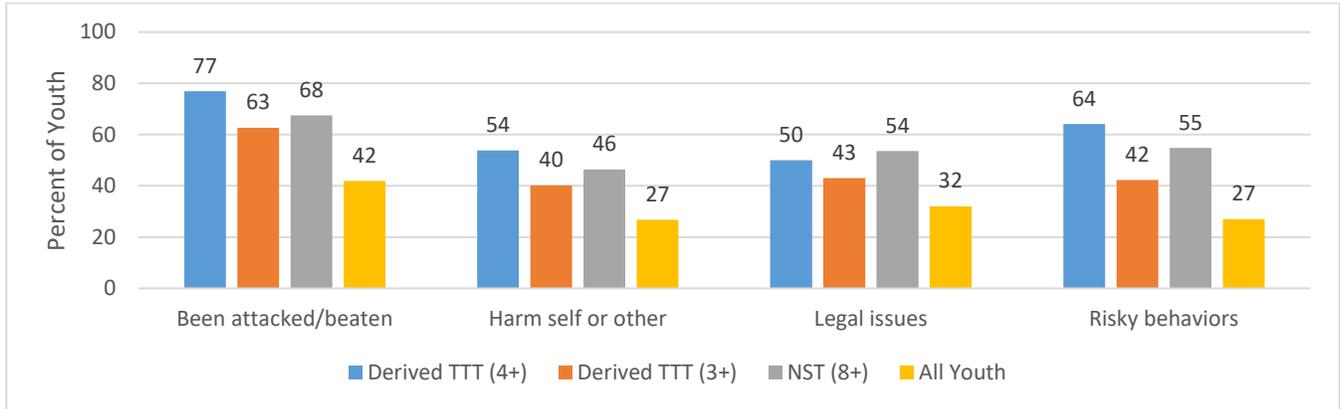
Figure 7 illustrates the rate at which each of the six items in the derived TTT are endorsed by those using each of the prioritization approaches as compared to all youth assessed for the pilot. Showing the same pattern as data presented in the figures above, youth identified by each prioritization approach endorsed these items at a higher frequency than all youth assessed in the pilot.

Figure 7: Distribution of Derived TTT Item Endorsement by Prioritization Approach

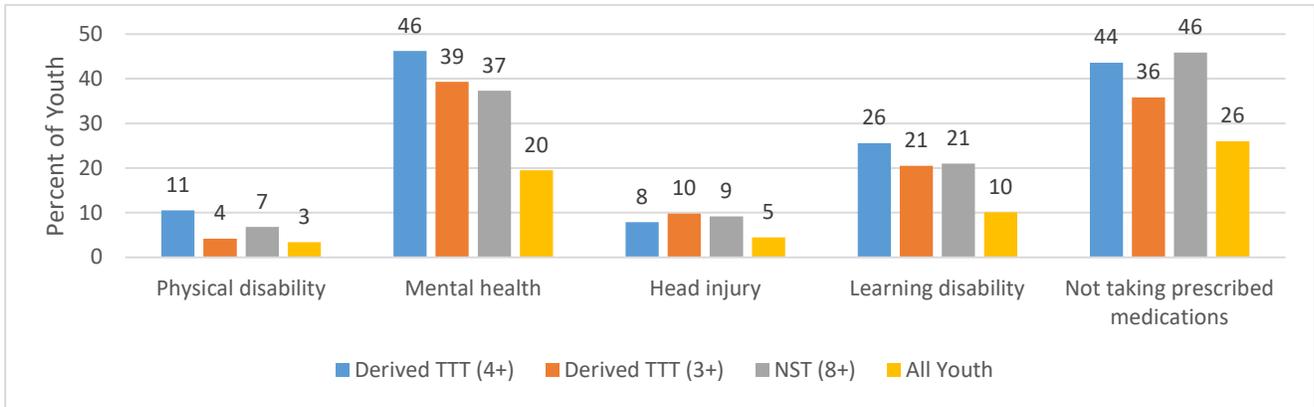


The next two graphs illustrate associations of variables from the NST not directly related to those in the derived TTT, but that nonetheless are likely to be associated with higher need for assistance to obtain and maintain stable housing.

*Figure 8: Distribution of Additional Vulnerability Factors by Prioritization Approach*



*Figure 9: Distribution of Additional Vulnerability Factors by Prioritization Approach*



Figures 8 and 9 illustrate that in six of the nine categories, youth with a derived TTT score of 4 or above have higher likelihood of possessing these additional characteristics associated with greater vulnerability, even though the tool does not specifically assess for them. Youth with higher scores on the NST tool are more likely to report having a head injury, legal issues, or not taking medications. In many of the categories, adding youth with a score of 3 to the TTT cut-off brought the group equal to or below the likelihood within the NST, but not for all categories.

In summary, these analyses indicate many ways in which the derived TTT — and possibly the actual TTT — might result in similar though somewhat distinct prioritization that appears to work well to capture high-need, and in some cases, even higher-need than the NST. The almost total overlap between the 4+ on the derived TTT and high scorers in the NST might suggest that the TTT selects for a smaller, very high-need group out of the total,

while still capturing things that the NST covers with more questions. On the other hand, when moving to the 3-point cut-off, it appears that the derived TTT group has lower rates on several items that it does not directly score for (including self-harm and risky behaviors and not taking medications), though on other things it does equally or nearly as well as the NST without specifically asking about them, including mental health, learning disabilities, and head injuries. Whether to consider moving to the TTT, therefore, depends on several factors, including how large a group of high-need youth the program seeks to identify, which of the additional vulnerability factors captured in the NST and not covered but still predicted by the TTT are most important, and how much the longer and more personally-sensitive set of questions are problematic for youth, or for staff to deliver in a trauma-informed way.

Alternatively, it may be that looking further at NST scores can provide an approach for narrowing down the prioritized population. Table 5 illustrates the number of assessed youth who received each of the NST scores produced. The shaded row shows the cut-off used during the pilot for prioritization for long term housing; a score of 8 resulting in 197 total youth. It is evident that moving the cut-off by one or more points in either direction affects the size of the pool of youth who would be prioritized.

One alternative strategy therefore is for a community to cut the NST at a point based on the size of the group for which there are resources currently available. For example, if there are 30 openings available, using a cut-off of 13 and above would prioritize the 33 youth with the absolute highest score.

*Table 5: Distribution and Possible Cut-Off Points for Youth NST Scores*

Score	Total # of Youth by NST Score	Cumulative # of Youth Total
16	2	2
15	4	6
14	10	16
13	17	33
12	21	54
11	20	74
10	39	113
9	34	147
8	50	197
7	66	263
6	58	321
5	68	389
4	62	451
3	38	489
2	19	508
1	11	519

## Conclusion

Our analysis finds differences and similarities between a derived TTT score and the Next Step Tool (NST) used in the pilot. Given concerns expressed by pilot partners regarding the NST in terms of time for assessments,

perceived intrusiveness and possible inaccuracies based on self-reporting it may be advantageous to move to a tool such as the TTT for initial assessments, since this tool is brief, less personally sensitive, and possibly produces more accurate results based on self-report. When used as intended with a 4-point cut-off, it produces a much smaller number of high-need youth than the NST, results that are more aligned with available housing interventions for youth with the highest needs. HUD's recent guidance on coordinated entry suggests that assessments may be done in phases. It is possible that the TTT could be used to identify the highest need youth, then a more detailed tool, such as the NST, could be used for distinguishing among more moderate need youth. We note that, alternatively, setting a higher point cut-off for prioritization using the NST could reduce the pool of youth in the highest priority category as well. This strategy could be employed immediately without needing to change tools or training. If adoption of the TTT is considered, we recommend testing the actual TTT to determine if the results we found above using a *derived* TTT score hold up, given the slightly different wording of some of the questions.