Addendum to TN ICDS Preanalysis Plan

Alejandro Ganimian, Karthik Muralidharan, and Chris Walters

July 29, 2018

This document briefly describes some additions to our planned analysis of the Tamil Nadu ICDS experiment. It is prompted by our measurements of enrollment at the endline survey, which show lower attendance and higher attrition than we previously expected.

This additional analysis will focus on the relationship between child AWC attendance and outcomes, with the goal of understanding whether children who received a higher "dosage" of the treatment experienced different treatment effects, and focusing on children with longer durations of exposure. To this end, we will make three additions to the analysis.

- We will estimate effects separately for children that entered the sample in the first and second years of the experiment. We will focus on the second year cohort, which was less affected by attrition and potentially subject to a full year of treatment exposure (the treatments were rolled out during the first year). It is worth noting that we made this addition to our analysis plan after observing preliminary attrition numbers for the second year but before estimating effects on outcomes separately by cohort.

- We will estimate relationships between duration of AWC attendance and outcomes separately in the treatment and control groups.

  - The rural household survey gathered quarterly pre-school enrollment histories for all children in sampled households. We will use this information to construct AWC exposure for all sample children.

  - We will then estimate equations relating outcomes to AWC exposure in the treatment and control groups. The control relationship may capture effects of AWC exposure along with selection into AWC attendance.

  - The difference between treatment and control relationships will capture incremental effects of the interventions under the assumption that selection into AWC attendance was not affected by treatment. We will discuss the assumptions necessary for this analysis to yield interpretable causal effects, and specifically note the caveat that variation in attendance is non-experimental.

- We will estimate impacts of the interventions separately by quartile of the AWC-level attendance rate.

  - Attendance rates will be measured from the following two data elements: (1) AWWs were asked, of each enrolled child – Did the child attend AWC at least once in the past 6 days? (2) Is the child present on the day of the survey? We will look at effects by quartile of each of these two measures.

  - Since the treatments may alter AWC attendance rates, this analysis may be affected by selection bias. We will discuss this issue and report effects on AWC attendance to diagnose its importance.