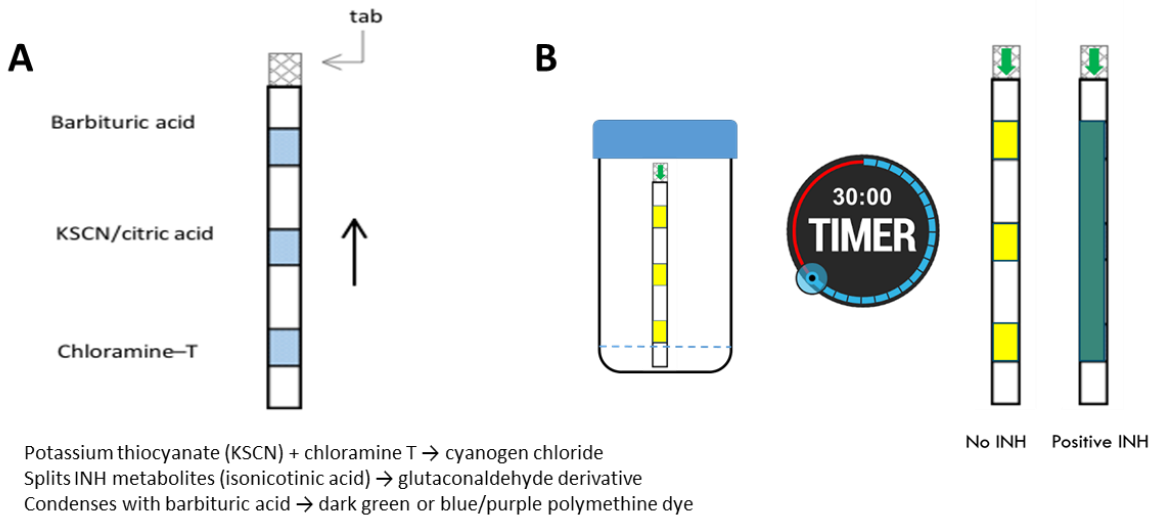
Supplemental Digital Content 2. Development of a urine dipstick assay to detect INH metabolites as a biomarker-based adherence measure. *Panel A:* Development of urine dipstick assay using a modified Arkansas method to detect the INH metabolite isonicotinic acid. By reversing the order of reagents, a lower concentration of reagents was required. *Panel B:* The INH dipstick is placed so that the bottom edge of the dipstick is in contact with the urine, allowing the urine to wick up the dipstick and then reviewed for color change at 30 minutes. A positive test is defined as a color change of green or blue/purple.



- Potassium thiocyanate (KSCN) + chloramine T → cyanogen chloride
- Splits INH metabolites (isonicotinic acid) → glutaconaldehyde derivative
- Condenses with barbituric acid → dark green or blue/purple polymethine dye