**POTENTIAL IMPROVEMENTS WITH RESPECT TO TORs**

The following text lays out what will be the questions we will answer and with what improvements. It has two separate modules which we believe are highly complementary, but we have explained and budgeted them separately

1. **MORE CREDIBLE ESTIMATE OF THE COST IN TERMS OF FORMAL JOBS, AND FOR WHOM.**

**Questions so answer:**

* Is there an effect of Seguro Popular (SP) in formal jobs?
* Are the result in the literature robust?
* Who are the “marginal formal sector workers”? Is the effect larger for them?

**Objective:** we will start from Bosch & Campos (2014) –the more well done paper to date in my opinion[[1]](#footnote-1)-- do a similar estimation on the effect of SP on formal jobs, and perform several robustness checks, using more and better data.

**Data:** IMSS individual worker panel level data --- we still have to get IMSS on board.

**Tasks:**

* To get a more credible causal estimates we will
  + Control for personal employment histories and salary time trends, and use the new DID methodologies.[[2]](#footnote-2)
  + Include time varying controls at the municipality level (at frequency hire than 5 years). For instance, lights from space (hard but doable).
  + Use distance to the nearest clinic in 2006 as an instrument for adoption of SP (need to get GPS data on clinics)
* To get more information on who is more affected we will:
  + Run regressions for those with low labor attachment (i.e. those that come in and out of IMSS dataset).
  + Estimate which are the characteristics of those with low labor attachment (gender, age, salary).
  + Test if those that had used IMSS hospital before Seguro Popular existed in their municipality are less likely to quit: we conjecture that those with medical conditions would stay more with IMSS (this requires IMSS hospitalization data)

**B. BENEFITS OF SEGURO POPULAR**

We believe that we have to change the conversation from an almost exclusive focus on costs, to that of benefits.

**Questions so answer:**

* Is there a health benefit of Seguro Popular in terms of deaths averted?
* Is there a health benefit of Seguro Popular in terms of reduced hospitalization?

**Objective:** using the same differences in differences methodology as above, test if those municipalities that implemented SP experience a decrease in deaths

**Data:** Data on deaths certificates, Data on hospitalizations, including those of IMSS.

**Tasks:**

* To estimate the effect of SP on health we will use a differences-in-differences methodology with Deaths in municipality per year as a dependent variable, by type of death, and test whether SP expansion to the municipality decreases deaths.
* We will also test if it reduces hospitalizations overall (subject to getting this data), and hospitalizations at IMSS to measure if SP relieved IMSS use (requires access to IMSS hospitalization data, at least at the municipality level)

1. They use administrative IMSS data at te municipality level instead of surveys. Surveys have been criticized heavily as they are not representative at the municipality level, and since they cover less than 40 cities. We plan to work with IMSS data. [↑](#footnote-ref-1)
2. https://jonathandroth.github.io/assets/files/DiD\_Review\_Paper.pdf [↑](#footnote-ref-2)