Health Outcomes and Cash Transfers: Evidence from Progresa in Urban Mexico

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Abstract

This paper studies the impact of Progresa program on urban areas and children's health anthropometric measures in Mexico. Using a differences-in-differences design by a locality's first year of enrollment and the children's age at first exposure to treatment, I estimate the effects of receiving one additional year of Progresa between 11 and 14 years old. My findings show that treated urban boys gain 1.9 centimeters (cm) more height for each additional year of treatment received. My estimates are slightly larger than previous findings using the rural experimental evaluation. Furthermore, my analysis underscores some unintended effects of the program on adolescent's health, such as an increase in the prevalence of overweight and obesity, particularly among girls (between 5 to 14 percentage points more). While these have been observed among the adult population from the rural experiment, my findings suggest that the urban poor experience these risks at younger ages. Further research is needed to understand the households' incentives to spend their cash transfer on healthy food, given the increasing availability of cheap ultra-processed food in urban areas.

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In the late 1990s, Mexico launched Progresa, a conditional cash transfer (CCT) program widely known for its experimental design and rigorous evaluations. The randomized control trial (RCT) assigned 506 rural localities¹ into treatment and control groups, where eligible families in the treated group received all benefits earlier than eligible control families (Levy, 2006). Using this variation, researchers have found evidence of the positive impacts of Progresa on children's health outcomes, such as height, weight, and health status.² Afterwards, Progresa was scaled up nationally, assuming its effects could be extrapolated elsewhere. However, given the program was designed to compensate for the opportunity cost of child labor by increasing school attendance in rural areas, these findings might not be the best guide for understanding Progresa's impacts in urban Mexico.

This paper provides novel causal estimates of Progresa's impacts on children's health anthropometric measures after its expansion to urban localities. I exploit the program roll-out in urban localities between 2000 and 2006 derived from a major political change in Mexico. Similar to Duflo (2001)'s work in Indonesia, I use a difference-in-differences design by a locality's first year of treatment and the children's age at first exposure to the intervention. I estimate the effects of receiving one additional year of Progresa during early adolescence on height, weight, and body mass index (BMI).

The data in this paper comes from two primary sources. First, I use administrative records on Progresa beneficiaries' enrollment by locality between 1999 and 2012. Second, I use the National Health and Nutrition Survey (ENSA 2000; ENSANUT 2006) to construct a repeated cross-section database by cohort of birth and locality of residence, which I link to Progresa's enrollment data. My sample includes individuals born between 1983 and 1989 who were eligible to receive the education cash transfer between 2000 and 2006.³ Following previous studies on the effectiveness of nutrition interventions, and given the biological differences observed in the children's growth trajectories, I set 14 years old as the maximum age for an individual to be effectively exposed to Progresa. This way, my treatment corresponds to the years an individual was exposed to the intervention before age fourteen.

¹Mexico is composed of 32 states, which are divided into municipalities, and these into localities.

²See Parker and Todd (2017) for a literature review of Progresa's findings throughout the years.

³Unfortunately, the ENSA 2000 only has data on health biomarkers for children over ten years old, which restricts the implementation of a differences-in-differences strategy for younger cohorts.

Using before and after treatment data, my DiD research design models the change in children's health trajectory—as they age—that can be causally attributed to the intervention. To do this, I focus the analysis on urban localities not treated by 2000 (before only 10% of urban localities were treated), and I estimate Progresa's intent-to-treat (ITT) effects for children living in the intervened localities. Then, using the take-up rate of the program observed in 2006, I calculate the local average treatment effect (LATE) among households in the lowest socioeconomic status (SES) tercile and compare my results to the treatment effects found using the RCT sample.

My identification strategy relies on two main assumptions. First, the parallel trend (PT) evolution on average children's health outcomes between localities' treatment adoption groups for staggered settings. Unfortunately, before 2000, Mexico had no other disaggregated data on children's health metrics. Instead, I test this assumption using three different proxies for children's health outcomes: locality fertility rates (1990-2012) and infant and neonatal mortality rates (1998-2012). I implement an event study analysis (Callaway and Sant'Anna, 2021), where I do not find any pre-trends on fertility rates. Moreover, consistent with Barham (2011), I find neither significant effects of Progresa on infant mortality in urban areas nor neonatal mortality rates. A second assumption refers to no anticipatory effects. Given my period of interest, my design exploits the program roll-out derived from a major political change in Mexico, which is unlikely to have been anticipated. Still, if the treatment time is correlated with a locality's characteristics, my estimates would be biased if these characteristics also affect my main outcomes. Using multiple administrative data sources, I show that a locality's roll-out year is unrelated to geographic, demographic, and socioeconomic variables (this is not true for rural areas).⁴

I find that receiving Progress before age 14 significantly increases urban children's height. My results show that boys gained 0.38 centimeters (cm) per year of treatment than their counterparts who did not receive the intervention by age fourteen. This corresponds to a 1.3% increase in their height after receiving five years of treatment, reaching up to a 2.1% increase for boys with low SES. In the case of girls, consistent with their growth period concluding

⁴From government documents, it is unclear the selection criteria for new entering localities –other than emphasizing marginality and adjacency to localities already enrolled (Progresa, 2000).

earlier, I find positive but imprecise effects on height (0.16 cm per year of treatment). A rough translation of these intention-to-treat effects into local effects on the treated implies that receiving Progresa for one year during early adolescence (11 to 14 years old) increased boys' height between 1.9 to 2.3 cm and 1 cm for girls.

Further, I find positive and significant effects on weight for both sexes, an effect consistently larger for children in the lowest SES tercile. Urban children receiving Progresa before age fourteen gain around 0.6 kilograms (kg) more weight per year of treatment. These ITT effects represent an average local effect on the treated between 3.3 kg more weight per one more year of exposure to treatment. Nonetheless, the latter increases do not necessarily imply a positive impact of Progresa on children's health, as more weight could be correlated with higher rates of overweight and obesity. For example, recent literature has emphasized a higher risk of a simultaneous manifestation of undernutrition and overweight and obesity—also known as the double burden of malnutrition—among the urban poorest in low and middle-income countries (Popkin et al., 2020).

To deepen these dynamics, I perform the analysis using BMI (kg/m²), and its standardized weight categories (i.e., underweight, overweight, obese). Two main results arise from this analysis. First, as expected, I find positive and significant effects of the intervention on children's BMI, though smaller and more imprecise for boys. Second, while some weight gains are explained by a small decrease in underweight prevalence (not statistically significant), the share of wasted children is relatively small in my sample. Instead, my findings point out a rising concern on the other side of the distribution. On average, the probability of being overweight and obese increases between 0.3 and 2.6 percentage points per year of exposure to treatment. These increments are consistently larger for both sexes in the lowest SES tercile, a 2.9 and 3.7 percentage points increase for boys and girls, respectively. These translate to a LATE of over ten percentage points increase in overweight and obesity prevalence per one more year of treatment.

The main contribution of this paper is to provide –to the best of my knowledge– the first causal estimates of Progresa's impact on health anthropometric measures of *urban* chil-

⁵This is likely explained by the fact that boys' weight gain is accompanied by an increase in their height, as opposed for girls who already stopped growing.

dren. Shifting from the RCT's 18 months of exposure to treatment, I estimate the effects of receiving one more additional year of treatment over six years during early adolescence. Compared to the RCT effects on children's health, I find larger effects of Progresa on boys' height (twice as large) but very similar in magnitude for girls (Gertler, 2004; Fernald et al., 2009, 2008b). Two factors can explain this. First, for very disadvantaged populations, previous studies have shown that health and nutrition interventions during adolescence might still significantly affect children's height (Georgiadis and Penny, 2017; Leroy et al., 2014). Second, given urban areas have fewer food access issues, urban beneficiary households can spend more money on food consumption (MPC=0.80), which translates into a higher total amount of calories consumed (Angelucci and Attanasio, 2009). However, this increase in food consumption seems to have also brought some unintended health effects.

Similarly to Fernald et al. (2008a), I find a positive and detrimental effect of Progresa on body mass index, but at younger ages. My findings show a significant increase in the prevalence of overweight and obesity, particularly worrisome among girls. Given the increasing availability of cheap ultra-processed food and beverages in urban areas (Popkin et al., 2020), it is likely that Progresa's money was used to buy non-healthy food, especially as beneficiary households did not have any restrictions on how to spend the money. This lack of conditionality from cash transfer programs has been discussed to increase BMI and obesity risk (Levasseur, 2019; Forde et al., 2012), posing new challenges to the design of CCT programs. Further research is needed to understand the dynamics between households' incentives to spend their CT on healthy food and the urban poor's disproportionate barriers to healthy food in low and middle-income countries (Vilar-Compte et al., 2021).

The paper proceeds as follows. Section 1 provides some background on Progresa. Section 2 explains the data and presents descriptive statistics of the sample. Section 3 details the identification strategy, and section 4 shows the results. Finally, section 5 compares my findings to those from the RCT and presents some concluding remarks, along with the paper's limitations and future research agenda on the topic.

1 Background

In 1997, following a major economic crisis, the Mexican government launched an innovative strategy to alleviate poverty: Progresa (Schooling, Health and Nutrition Program). It began as a pilot randomized control trial (RCT) in rural Mexico. The RCT selected 506 rural localities from seven states to participate in the program. Localities were randomly assigned into treatment and control groups, where eligible households in the treated group received the benefits 18 months earlier than eligible households in the control group (early 1998 to late 1999). After the RCT concluded, Progresa was expanded to eligible families in highly impoverished rural and semi-urban municipalities in Mexico (Parker and Todd, 2017; Skoufias, 2005).

Later, in 2000, Progresa rapidly escalated to the rest of the country –including urban cities. This expansion followed a significant change in Mexico's political environment when the incumbent party lost the presidential elections for the first time in over seventy years. The program continued functioning and growing through the years, and by 2016, it covered almost one-fourth of the Mexican population. Still, the intensive urban household enrollment peaked between 2001 and 2005, as new localities were incorporated each year (Figure 1). During this period, the program roll-out became less geographically targeted (by marginality classification), and its implementation differed considerably from the former rural-established program.

Originally, eligible families were notified about Progresa after a socioeconomic screening was conducted for all households. After this initial screening, eligible families received a home visit to verify their socioeconomic status. If accepted into Progresa, they remained beneficiaries for the next 3 years as long as they comply with their co-responsibilities. However, this census became unfeasible in urban localities. Instead, interested families in urban localities needed to attend the register office and respond to the screening questionnaire to corroborate their eligibility. This entrance barrier resulted in self-selection and low take-up rates of the program, as not everyone was aware of their existence (Parker et al., 2005).

Progresa is widely known for its cash transfer (CT) conditional on school attendance. However, its multifactor design enclosed multiple benefits (Levy, 2006). These included a food CT per person, nutritional supplements, and healthcare access for all household members, conditional on the beneficiary coresponsibilities. As part of the conditionality, all beneficiary members were required to attend their periodic healthcare check-ups (based on their age), and one member per household –usually the mother– needed to participate in the health and nutrition workshops offered at their public clinics (every 2 or 3 months). In addition, beneficiary families with children between 3rd and 12th grade of school received the conditional education CT.⁶ While the food cash aid was fixed for all beneficiary households, the education grant's amount varied by children's school grade and sex, aiming to compensate for the opportunity cost of staying in school, with a maximum limit per family. The amounts were modified every year, and all monetary transfers were given directly to the female head of the household.

2 Data

My data comes from two main sources at the locality level. First, I use administrative records on Progresa beneficiaries' enrollment between 1999 and 2012. These include the total number of families enrolled in the program by residence locality at the end of each fiscal year. A locality—the smallest geographic unit in Mexico— served as the target level to scale up Progresa.⁷ I identify the year when a locality enters the intervention using the first time I observe at least one beneficiary family in the data. Following the definition of urban settlements, my sample of interest includes localities with more than 5,000 inhabitants during my period of study. Then, I match this with other available sources on geographic,

⁶Initially Progresa only covered up to the 9th grade. In 2001, they extended it up to the 12th grade, and in 2012, they incorporated the 1st and 2nd grades for the schooling benefits.

⁷Mexico is composed of 32 autonomous states, divided into municipalities, and these into localities. Localities have changed throughout the years, but Mexican public records allow me to identify movements and changes in the territorial division using their 9-digit id (INEGI, 2022).

demographic, and socioeconomic characteristics to create a locality panel data between 1995 and 2010 (N = 1,166).⁸

Figure 1 shows the aggregate number of new households enrolled in Progresa, and the total number of localities newly incorporated between 1999 and 2011. It also includes the new household enrollment in urban areas (dotted line) with the number of new urban localities incorporated each year. As previously mentioned, we observe that the largest expansion in rural areas peaked in 1999, and later in 2010. However, for urban areas, the largest expansion occurs between 2001 and 2004. During this period, over half of the new households enrolled in the program belonged to urban areas. The only exception is 2003, the year of midterm elections when new enrollment was temporarily suspended.

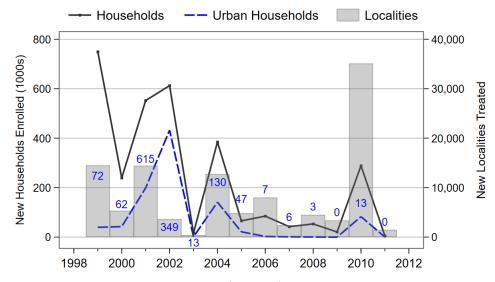


Figure 1: Progresa New Enrollment by Locality and Households, 1999-2011

Notes: Bars represent all new localities treated each year (right axis), where the number in each bar corresponds to the new urban localities treated. Source: Progresa Administrative Records.

Second, I use the National Health (ENSA, for its acronym in Spanish), and the National Health and Nutrition Survey (ENSANUT) to construct a repeated cross-section data set, representative of Mexican children from rural and urban localities. As the predecessor for the ENSANUT, the ENSA 2000 is the first cross-sectional survey in Mexico to include biological health metrics—such as height and weight. These biomarkers were measured directly on-

⁸These include cartographic data and Population Censuses from the National Institute of Statistics and Geography (INEGI); marginality indexes from the Population National Counsel (CONAPO); Health Resources data from the Ministry of Health (SS).

site by trained and standardized nurses, following international guidelines. Weight was measured in kilograms (kg) using a calibrated solar scale, and height in centimeters (cm) using a flexometer. While the ENSANUT measures biomarkers for children over 1 year old, the ENSA 2000 only includes them for adults and children over 10 years old (INSP, 2003).

In addition,⁹ the ENSANUT includes data on the socioeconomic and demographic characteristics of households' members, such as indigenous language, literacy, schooling, marital status, employment, self-reported income, and government subsidies. It also incorporates information on houses' economic characteristics; for example, ownership, construction materials (i.e. floor, walls, roof), number of rooms, household assets, sanitary conditions (e.g. drinking water, sewage), and access and utilization of healthcare services. With these, I construct a household's socioeconomic status (SES) index –for each year– using principal component analysis (PCA). When comparing the index with Progresa's take-up rate in 2006, all beneficiary households lie in the first SES tercile. Thus, I define those children from households in the lowest SES tercile for each wave, who are more likely to represent Progresa's eligible population. For comparison across years, I transform this index to percentiles.

By matching both datasets, I construct a repeated cross-section database for individuals by cohort of birth and locality of residence. This includes cohorts of birth between 1983 and 1989, who would have been eligible to receive Progresa's education grant (11 to 17 years old) if their locality were treated in 2000 (with available health data in the first wave). My sample includes 11,710 children residing in 427 urban localities. In the next section, I propose and test an identification strategy that allows me to estimate the intent-to-treat (ITT) effect of receiving Progresa during early adolescence.

3 Identification Strategy

My identification strategy exploits the temporal variation in Progresa's roll-out at the locality level and age at first exposure to the program. For each locality ℓ , I observe the year they receive the program for the first time. I focus the analysis on urban localities receiving

⁹From now on, I will use ENSANUT to refer to both the ENSA (2000) and ENSANUT surveys.

Table 1: Mean Descriptive Statistics on Urban Households by Socioeconomic Status

| | E | ENSANUT 2 | 2000 | E | ENSANUT 2006 | | | |
|------------------------------|------------|----------------|-----------------|------------|----------------|-----------------|--|--|
| | (1) All | (2) Low SES | (3) High SES | (4) All | (5) Low SES | (6) High SES | | |
| Take-up of Progresa (%) | 0.0 | 0.0 | 0.0 | 9.8 | 26.5 | 0.0 | | |
| Household size | 3.98 | 4.76 | 3.67 | 4.28 | 4.33 | 4.28 | | |
| Health Insurance (prop.) | 0.58 | 0.43 | 0.65 | 0.61 | 0.56 | 0.64 | | |
| With children (prop.) | 0.68 | 0.90 | 0.60 | 0.69 | 0.70 | 0.69 | | |
| Number of children | 1.49 | 2.43 | 1.14 | 1.56 | 1.73 | 1.48 | | |
| With adults over 70y (prop.) | 0.13 | 0.03 | 0.15 | 0.15 | 0.20 | 0.13 | | |
| Head of Household | | | | | | | | |
| Age | 45.7 | 36.4 | 48.0 | 48.3 | 49.5 | 47.7 | | |
| Female (prop.) | 0.04 | 0.04 | 0.04 | 0.22 | 0.29 | 0.19 | | |
| Married (prop.) | 0.76 | 0.88 | 0.72 | 0.76 | 0.69 | 0.79 | | |
| Schooling (years) | 7.76 | 6.68 | 8.21 | 7.30 | 5.28 | 8.58 | | |
| House characteristics | | | | | | | | |
| Rooms per person | 0.61 | 0.36 | 0.71 | 0.58 | 0.51 | 0.62 | | |
| Firm roof (prop.) | 0.76 | 0.54 | 0.86 | 0.80 | 0.51 | 0.97 | | |
| Firm floor (prop.) | 0.96 | 0.88 | 0.99 | 0.96 | 0.89 | 1.00 | | |
| Firm walls (prop.) | 0.97 | 0.93 | 0.99 | 0.93 | 0.84 | 0.99 | | |
| With electricity (prop.) | 0.99 | 0.98 | 1.00 | 0.99 | 0.98 | 1.00 | | |
| With sewage (prop.) | 0.94 | 0.85 | 0.99 | 0.96 | 0.89 | 1.00 | | |
| With water acces (prop.) | 0.97 | 0.92 | 0.99 | 0.98 | 0.94 | 1.00 | | |
| Households (N) | 27,981 | 7,243 | 17,148 | 29,349 | 10,758 | 16,948 | | |

Notes: Sample weighted means. Low SES corresponds to the first index tercile; high SES includes the second and third index terciles. Sources: ENSANUT.

Progress between 2001 and 2005, which I define as the treatment adoption group G_{ℓ} . Note that this excludes 17 localities treated later, which are also very different from those treated during my period of interest (see Table 2).

However, not all children exposed to the intervention will be potentially affected. Progress can only affect children's health biomarkers if it occurs during biological growth. For the same treatment adoption group G_{ℓ} , the individual's exposure to treatment will vary by birth cohort. For each cohort of birth j, I calculate the age at first exposure to Progress based on their locality's treatment adoption group as: $\tilde{a}_0 = G_{\ell} - j$. Following Parker and Vogl (2023), I set fourteen as the maximum age of effective exposure to Progress. ¹⁰ I define

¹⁰This threshold is also illustrated in Figure A.2, where growth stabilizes around fourteen years old for girls and around fifteen years for boys.

my treatment as a continuous variable that accounts for the total years of treatment received before (or equal) 14 years old in 2006. Based on this definition, children must be younger than 14 years old in 2000. Furthermore, given I only observe health outcomes of children over 10 years old at baseline, my analysis focuses on children born between 1987 and 1989, who were 11 to 13 years old in 2000 and 17 to 19 years old in 2006.

Similar to Duflo (2001) analysis in Indonesia, I employ a differences-in-differences (DiD) design with repeated cross-sectional data. In addition to the standard DiD estimation, I include a vector of birth cohorts by time-fixed effects that control for the stage in their growth trajectory. I estimate my model using the following equation:

$$Y_{ij\ell st} = \beta Y ears Treated_{j\ell t} + \alpha_t \times \phi_j + \theta_{a(\ell)} + X'_{i\ell} \Gamma + \eta_s + \varepsilon_{ij\ell st}$$
 (1)

where, $Y_{ij\ell st}$ is the health outcome for individual i from cohort of birth j in locality ℓ in state s at year t; $YearsTreated_{j\ell t}$ is the total years of treatment received before 14 years old in 2006; $\theta_{g(\ell)}$ corresponds to treatment adoption group fixed effects; α_t are time fixed effects; ϕ_j are cohort of birth fixed effects (1987-1989) $X_{i\ell}$ is a vector of individual and locality covariates; η_s are state fixed effects; and $\varepsilon_{i\ell sct}$ is an error term. I cluster my standard errors by locality. Given that I cannot observe who was eligible to receive the program before it began, my analysis reflects an intent-to-treat (ITT) approach rather than a treatment effect on the treated.

My identification strategy requires three main assumptions. First, it relies on the abrupt transition of urban localities into receiving Progresa. As mentioned before, given that the most impoverished municipalities received the intervention earlier, the second phase of Progresa's scale-up was less economically and geographically targeted. While the municipality marginality index was the main criteria for incorporating new localities, there are no records of a clear threshold used to decide the incorporation of new urban localities. By definition, urban localities have a lower marginality index than rural areas. Still, if initial poverty determines a locality's year of enrollment, my estimates will be biased. I test this by regressing a locality's transition year with a pre-treatment demographic, socioeconomic, and geographic characteristics vector. Table 2 shows the descriptive statistics pre-intervention by treatment

adoption group, along with the OLS coefficients. Despite the differences in levels, I do not find evidence suggesting a correlation between the time of treatment and important economic determinants (columns 7 and 8). Another reason for this could be the closeness between urban centers, as proximity within treated localities was also an incorporation criteria to avoid migration between localities.

Table 2: Baseline Characteristics for Urban Localities by Treatment Adoption Group

| | | Means in 2 | 2000 by Year | r of First Tre | eatment | |
|----------------------------|-------------|-------------|--------------|----------------|-------------|--------------|
| | (1) 2001 | (2) 2002 | (3) 2003 | (4) 2004 | (5) 2005 | (6) After |
| Marginality (percentile) | 59.3 | 42.5 | 32.7 | 37.1 | 37.4 | 18.3 |
| Social Lag (percentile) | 58.1 | 43.8 | 34.8 | 40.3 | 42.8 | 19.7 |
| Population (1000s) | 14.3 | 75.2 | 9.7 | 159.1 | 45.8 | 409.5 |
| Households (1000s) | 3.3 | 18.2 | 2.2 | 36.4 | 10.7 | 104.9 |
| Female Head of HH (%) | 18.5 | 18.1 | 15.9 | 16.1 | 14.9 | 20.8 |
| Children 6-17y (%) | 27.8 | 26.6 | 26.2 | 26.2 | 25.5 | 21.0 |
| Children not in school (%) | 17.3 | 14.9 | 14.9 | 15.4 | 13.1 | 15.7 |
| Illiteracy Rate (%) | 10.6 | 7.8 | 6.6 | 6.8 | 5.6 | 5.7 |
| No Health Insurance (%) | 65.4 | 55.6 | 52.1 | 57.0 | 61.8 | 54.0 |
| Physicians per 10k | 8.8 | 6.6 | 3.9 | 5.7 | 5.8 | 9.3 |
| Clinics per 100k | 12.2 | 8.0 | 12.2 | 8.2 | 8.4 | 2.4 |
| Localities $(N = 1, 166)$ | 615 | 349 | 13 | 130 | 47 | 17 |

Notes: Sample restricted to urban localities treated after 2000. Sources: CONAPO, INEGI, Progresa Administrative Records, Ministry of Health.

The second assumption refers to the parallel trends (PT) premise. My strategy assumes if treatment had not occurred, the average outcomes for all adoption groups g_{ℓ} would have evolved in parallel.¹¹ Ideally, I would test for pre-trends between treatment and control groups in my main outcomes. However, before 2000, Mexico had no other disaggregated data on children's health biomarkers. Instead, I use three outcomes as proxies for children's health, which the literature has evidenced in their correlation with health biomarkers. Following Callaway and Sant'Anna (2021), I implement an event-study analysis by year when a locality first receives the program using annual fertility rates and infant and neonatal mortality rates for urban localities (Figure 3). Consistent with previous work by Barham (2011), I find no significant effects of Progresa on infant mortality in urban areas, also true for neonatal mortality rates. Regarding fertility rates, I observe a significant decrease after

 $[\]overline{ ^{11} \text{For all } t \neq t' \text{ and } g \neq g' \text{:} \quad \mathbb{E} \left[Y_{\ell,t}(0) - Y_{\ell,t'}(0) \mid G_{\ell} = g \right] = \mathbb{E} \left[Y_{\ell,t}(0) - Y_{\ell,t'}(0) \mid G_{\ell} = g' \right]$

All Localities ENSANUT Marginality (percentile) Social Lag (percentile) Population (1000s) Households (1000s) Female Head of HH (%) Children 6-17y (%) Children not in school (%) Illiteracy Rate (%) No Health Insurance (%) Physicians per 10k Clinics per 100k -.1 .2 .1

Figure 2: Predicting a Locality's Year of First Treatment (2001-2012)

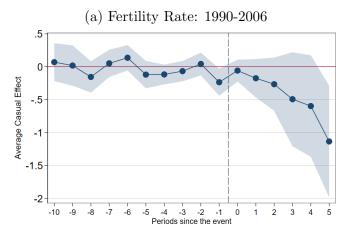
Notes: $Year_{\ell m} = \alpha + \mathbb{X}_{\ell}'\beta + \eta_m + \varepsilon_{\ell m}$ for locality ℓ in municipality m. OLS coefficients with 95% confidence intervals (intercept omitted). Standard errors clustered by locality, with population weights. Sample restricted to urban localities treated after 2000. Sources: CONAPO, INEGI, Progresa Administrative Records, Ministry of Health, ENSANUT.

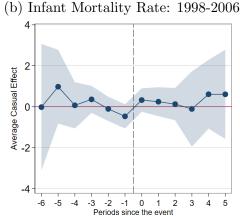
the intervention. However, given my sample was at least ten years old at the time of the intervention, this does not affect my analysis.

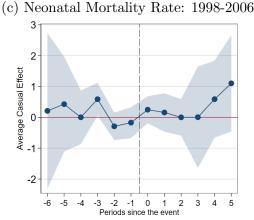
4 Results

My results show the intent-to-treat effects of receiving one more year of Progresa before age fourteen. I find that Progresa significantly increases height and weight among children in urban areas. My estimates are robust to including individual and locality controls (see Appendix B). Table 3 shows the estimates from my preferred specification controlling for socioeconomic index, marginality index, the share of children between 6-17 years old, and the number of physicians per one thousand population. Treated boys gain 0.42 centimeters (cm) in height per year of exposure to Progresa, which corresponds to a 1.5% increase in height over an average period of 5 years. On the other hand, the ITT effect on girls' height is positive but not statistically significant (0.2 cm). This is consistent with their growth period concluding earlier than boys, approximately one year after their menarche or first menstruation (between 11 and 12 years old).

Figure 3: Event-Study Analysis for Pre-Trends in Health Outcomes







Notes: Callaway and Sant'Anna (2021) estimator with 95% confidence intervals (CI). Infant Mortality Rate equals the number of deaths in children under one year old per 1,000 births. The neonatal Mortality Rate equals the number of deaths in children under one month old per 1,000 births. Fertility Rate equals total births per 1,000 inhabitants. All rates are annual by urban locality of residence, weighted by population. H_0 : $\beta^{PRE} = 0$, p-value: (a) 0.500, (b) 0.883, (c) 0.837. Sources: Natality records, Mortality records, Population Censuses (1990, 1995, 2000, 2005, 2010).

In addition, I find positive and significant effects on weight for both sexes. Urban children receiving Progresa before age fourteen gain between 0.63 and 0.79 kilograms (kg) more weight per year of treatment. This corresponds to an average 7.5% increase in weight for an exposure of 5 years to the intervention among boys and a 9.2% rise in weight for girls. Based on these, I only find significant ITT effects on girls' BMI. Girls gain 0.37 units of BMI (kg/m²), which translates to a 1.8% increase per year of treatment. Though still positive for boys, the coefficient on BMI is more imprecise, as boys' weight gain is also accompanied by an increase in their height (0.6% increase per year of treatment). Nonetheless, these increments in weight and BMI are only beneficial for wasted and underweight children. Otherwise, more weight could be correlated with higher rates of overweight and obesity.

Table 3: Intent-to-Treat Effects on Anthropometric Measures

| | Heigh | t (cm) | Weig | ght (kg) | I | BMI |
|---|--------------------|---------------------|---------------------|------------------------|---------------------|------------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| Years Treated | 0.424** (0.179) | 0.208 (0.164) | 0.626** (0.272) | 0.789** (0.317) | 0.128 (0.093) | 0.369*** (0.120) |
| SES Index | 0.042 (0.027) | $0.030 \\ (0.022)$ | 0.083** (0.039) | 0.121*** (0.036) | $0.026* \\ (0.015)$ | 0.043*** (0.014) |
| (SES Index) 2 | 0.0001 (0.0003) | -0.0001 (0.0002) | -0.0005 (0.0004) | -0.0011*** (0.0004) | -0.0002 (0.0002) | -0.0004*** (0.0002) |
| Locality Controls | yes | yes | yes | yes | yes | yes |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV | 144.1 | 145.3 | 41.7 | 42.8 | 19.8 | 20.0 |
| Observations | 2,702 | 2,960 | 2,726 | 2,929 | 2,697 | 2,907 |
| \mathbb{R}^2 | 0.765 | 0.492 | 0.554 | 0.361 | 0.216 | 0.213 |

Following on these, table 4 shows the intent-to-treat effects on the probability of being underweight, overweight, and obese —each with respect to the normal weight BMI category. The first two columns show my estimates on underweight prevalence for boys and girls, respectively. I do not find any statistically significant effects on these, likely driven by a low prevalence of underweight for this population —on average 4.4%. On the other side, I find positive and statistically significant effects on overweight and obesity, where around one-third of my sample is either overweight or obese. On average, receiving one more year of Progresa increases girls' overweight and obesity probability by 2.8 and 1.7 percentage points, respectively. In the case of boys, both estimates are more imprecise; a one percentage point increase in obesity prevalence by one more year of receiving treatment.

In addition, I repeat the analysis without any restrictions on the effective age to receive treatment (14 years old), including all birth cohorts eligible to receive Progresa for at least one year between 2000 and 2006 (i.e., children born between 1983 and 1989). Consistent with the fact that boys continue their growth until 18 years old, I find larger ITT effects of receiving

Table 4: Intent-to-Treat Effects on BMI Categories

| | Under | weight | Overv | weight | Obe | esity |
|--|---------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| Years Treated | 0.0089 (0.0086) | -0.0020 (0.0078) | 0.0021 (0.0124) | 0.0280** (0.0142) | 0.0104* (0.0063) | 0.0167*** (0.0057) |
| SES Index | -0.0021 (0.0016) | -0.0009 (0.0009) | 0.0029* (0.0015) | 0.0031** (0.0015) | 0.0016* (0.0009) | 0.0020** (0.0008) |
| (SES Index) 2 | 0.00003 (0.00002) | $0.00001 \\ (0.00001)$ | -0.00003 (0.00002) | -0.00003* (0.00002) | -0.00001 (0.00001) | -0.00002* (0.00001) |
| Locality Controls | yes | yes | yes | yes | yes | yes |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \ \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.042 | 0.046 | 0.278 | 0.257 | 0.078 | 0.052 |
| Observations | 1,792 | 2,022 | 2,339 | 2,647 | 1,872 | 2,026 |
| \mathbb{R}^2 | 0.053 | 0.030 | 0.034 | 0.040 | 0.038 | 0.048 |

one more year of Progresa's intervention on both boys' height and weight (Table A.6). However, these increments are not accompanied by an increased prevalence of overweight and obesity, as before. On the other hand, though positive, I do not find any statistically significant effect on girls' anthropometric measures. Yet, their probability of being overweight increases to 3.7 percentage points, and up to 2.2 percentage points for obesity prevalence (not statistically significant), by one more year of receiving Progresa (Table A.7).

Further, my estimates evidence a non-linear relationship between socioeconomic status and risk of overweight and obesity. While having a higher SES index is correlated with higher weight and BMI, the effects are smaller for individuals in the farthest part of the SES distribution. This is consistent with recent literature emphasizing how the urban poorest face a higher risk of undernutrition and overweight –also known as the double burden of malnutrition (Popkin et al., 2020). To deepen on this, I perform a new analysis by socioeconomic status interacting my treatment with a dummy variable for *Low SES* using the following equation:

$$Y_{ij\ell st} = \beta_L Y ears Treated_{j\ell t} \times Low_{it} + \beta_H Y ears Treated_{j\ell t} \times High_{it}$$

$$+ \alpha_t \times \phi_j + \theta_{g(\ell)} + X'_{i\ell} \Gamma + \eta_s + \varepsilon_{ij\ell st}$$

$$(2)$$

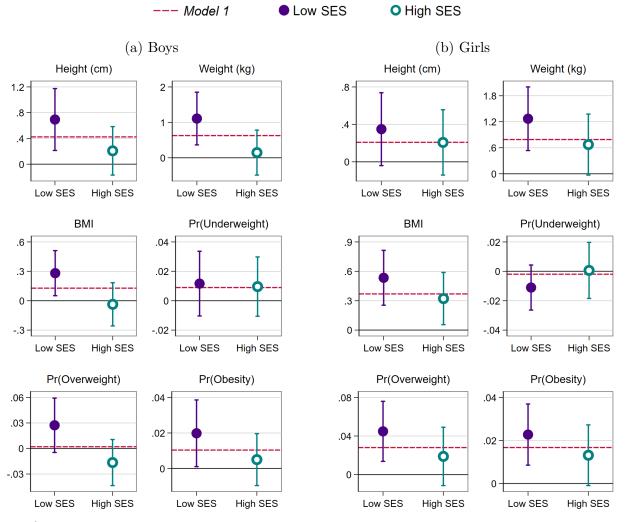
where, $Low_{it} = 1$ if individual i at year t corresponds to the lowest tercile of the SES index distribution, and $High_{it} = 1$ if individual i at year t is above the first tercile of the SES index distribution. As before, my main estimates, $\hat{\beta}_L$ and $\hat{\beta}_H$, correspond to the intent-to-treat effect of receiving one more year of treatment –for each income group, respectively.

Figure 4 shows these estimates by sex, comparing them with my results from model 1 (dotted line). First, all estimates for low SES children are statistically different from zero (except for underweight prevalence), while only the coefficient on BMI for high SES girls remains statistically significant. This suggests that most of the effect found before is driven by children in the lowest socioeconomic tercile, which is to be expected as only low-income households were eligible to receive Progresa.

On average, per one more year of exposure to Progresa, poor urban boys gain 0.69 cm, and poor urban girls gain 0.35 cm in height. Similarly, poor urban children receiving Progresa gain around 1.2 kilograms (kg) more weight per year of treatment, which also translates to a significant increase in BMI (0.3 and 0.5 units for boys and girls, respectively). However, these BMI increments have different interpretations between boys and girls. On one side, some of the increase in BMI is helping to reduce underweight prevalence among low SES girls (though not statistically significant). On the other side, poor-treated girls increase their overweight prevalence by 4.5 percentage points for each year of receiving Progresa treatment and have 2.3 percentage points more probability of being obese. In the case of poor-treated boys, only their prevalence of overweight and obesity increases by 2.7 and 2.0 percentage points, respectively.

Note all these intent-to-treat effects are significantly larger if we calculate the local average treatment effect (LATE) using the observed take-up rate of the program in 2006 among low SES children (26.5%). For example, the LATE for poor urban boys corresponds to a 2.6 cm increase in height for each year of treatment received before fourteen years old and 1.3 cm among poor urban girls. Alternatively, I can estimate the LATE with a Two-Step Least

Figure 4: Intent-to-Treat Effects of Progresa by Sex and Socioeconomic Status



Notes: $\hat{\beta}_s$ coefficient by SES group with 95% confidence intervals (equation 2). Dotted line shows coefficient from equation 1. Sample restricted to children born between 1987-1989 from urban localities treated between 2001-2005. All regressions include sample weights and standard errors clustered by locality. Individual covariates are interacted with a missing-value indicator to control for attrition bias. Sources: ENSANUT, Progress Administrative Records, CONAPO, INEGI, Ministry of Health.

Squares (2SLS) approach, using Progresa's take-up rate observed in 2006 as an instrument (Imbens and Angrist, 1994). Table 5 summarizes these local average treatment effects on each outcome by sex, using both methodologies. The LATE estimates are qualitatively similar, though the 2SLS are more conservative.

Table 5: Local Average Treatment Effects by Additional Year of Treatment

| | C | DLS | 29 | SLS |
|-----------------------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Outcome | (1) Boys | (2) Girls | (3) Boys | (4) Girls |
| Height (cm) | 2.619*** (0.921) | 1.317* (0.747) | 1.944*** (0.794) | 1.113 (0.758) |
| Weight (kg) | 4.177*** (1.426) | 4.789*** (1.408) | 2.880** (1.187) | 4.108*** (1.422) |
| $\mathrm{BMI}\ (\mathrm{kg/m^2})$ | 1.060** (0.442) | 2.015*** (0.536) | 0.616 (0.410) | 1.828*** (0.542) |
| $\Pr(\text{Underweight})$ | 0.0438 (0.0423) | -0.0415 (0.0294) | 0.0449 (0.0379) | -0.0107 (0.0345) |
| $\Pr(\text{Overweight})$ | 0.1030* (0.0611) | 0.1691*** (0.0596) | 0.0202 (0.0554) | 0.1400** (0.0638) |
| Pr(Obesity) | 0.0747** (0.0358) | 0.0857*** (0.0272) | $0.0504* \\ (0.0276)$ | 0.0816*** (0.0251) |

Notes: Sample restricted to birth cohorts from 1987 to 1989 from urban localities treated between 2001-2005. *** p < 0.01, ** p < 0.05, * p < 0.10. Sources: ENSANUT, Progresa Administrative Records, CONAPO, INEGI, Ministry of Health.

5 Discussion

Compared to the RCT effects on children's health, I find larger effects of Progresa on boys' height (twice as large) but very similar in magnitude for girls (Gertler, 2004; Fernald et al., 2009, 2008b). While this could be derived from receiving the intervention at different growth periods and the biological differences by sexes, these do not explain the increase in overweight and obesity risk among urban poor children. From these seemingly opposite effects, we need to understand first the differences among urban beneficiaries—before evaluating the net impact of Progresa on urban children's health.

As mentioned before, Progresa was originally designed for rural communities, where the cash transfer amount compensated for the opportunity cost of child labor. However, even among low-income populations, urban areas have higher schooling rates than rural localities. In this sense, the trade-off between receiving Progresa's CCT and keeping children in school (instead of sending them to work) will likely be lower for urban beneficiary families. This has been evidenced in previous studies analyzing the effects of Progresa on school

enrollment using an urban sample. Behrman et al. (2012) find that –for an average treatment of 18 months– secondary school enrollment (12 to 14 years old) increases between 2.7 and 3 percentage points for girls and between 1 and 1.3 percentage points for boys. In comparison, for the same age bracket using the RCT sample, the effects of receiving the intervention 18 months earlier are significantly larger, with an average increase of 9 and 6 percentage points in school enrollment among girls and boys, respectively (Schultz, 2004).

This lower trade-off can also be interpreted as a higher marginal benefit per dollar of transfer received among urban households. Despite urban areas having fewer food access issues, urban beneficiary households spend 80% of their cash transfer on food consumption (Angelucci and Attanasio, 2009), which translates to an increase in the total amount of calories consumed between 12 and 17.5% after 18 months of treatment. In comparison, for this same treatment exposure, treated households in the RCT increase their average total calorie consumption by 7 percent (Gertler et al., 2012; Hoddinott and Skoufias, 2004). This increase in food consumption might explain the larger effects of Progresa on urban children's height. However, it also brought some unintended health effects, as beneficiary households did not have any restrictions on how to spend the money.

This detrimental effect of Progresa was previously observed by Fernald et al. (2008a) among adults' BMI from the RCT sample and has been studied among the adult population from other cash transfer programs (Levasseur, 2019; Forde et al., 2012). However, my findings underscore that urban beneficiaries experience these risks at earlier ages. In this sense, despite the so-called urban advantage, the urban poorest face disproportionate barriers to accessing healthy food, such as higher transportation costs to buy food, limited access to fresh produce, and lack of production for self-consumption (Vilar-Compte et al., 2021; Dutra et al., 2018). These, combined with an increase in the availability of cheap, ultra-processed food and beverages in urban areas, put urban adolescents at a higher risk of overweight and obesity. This poses new challenges for the optimal design of conditional cash transfer programs in low and middle-income countries, as further research is needed to understand the households' incentives to spend their cash transfer on healthy food.

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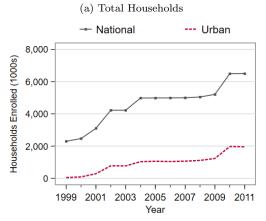
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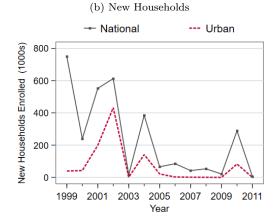
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Appendix

A Figures

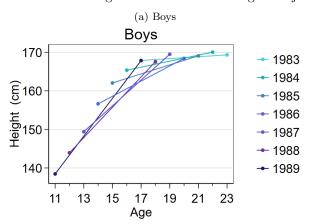
Figure A.1: Progresa New Household Enrollment, 1999-2011

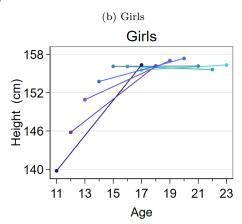




Source: Progresa Administrative Records.

Figure A.2: Children's Height Trajectory by Sex and Cohort of Birth





Notes: Mean height in each wave (2000 and 2006) by cohort of birth with their age (horizontal axis). Sample restricted to children from urban localities treated between 2001-2006. Sources: ENSANUT, Progresa Administrative Records.

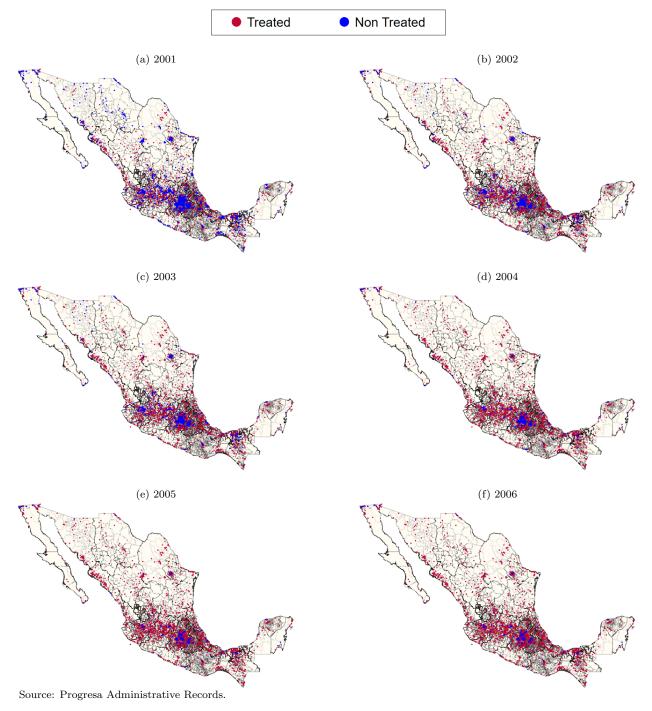


Figure A.3: Progresa's Scaling-Up to Urban Localities by Year, 2001-2006

Newly Treated Treated in t-1 Non Treated (b) 2002 (a) 2001 Newly Treated Newly Treated Treated in t - 1 ● Treated in t - 1 O Non Treated O Non Treated (c) 2003 (d) 2004 Newly Treated Newly Treated O Non Treated O Non Treated (e) 2005 (f) 2006 Newly Treated Newly Treated O Non Treated O Non Treated $Source:\ Progresa\ Administrative\ Records.$

Figure A.4: Progresa's Scaling-Up to New Urban Localities by Year of Entrance, 2001-2006

B Tables

Table A.1: Descriptive Statistics on Urban Households by Socioeconomic Status

| | | ENSANUT 20 | 000 | | ENSANUT 20 | 006 |
|--|------------|----------------|-----------------|------------|----------------|-----------------|
| | (1) All | (2) Low SES | (3) High SES | (4) All | (5) Low SES | (6) High SES |
| Take-up of Progresa (%) | 0.0 | 0.0 | 0.0 | 9.8 | 26.5 | 0.0 |
| | (0.0) | (0.0) | (0.0) | (29.7) | (44.2) | (0.0) |
| Household size | 3.98 | 4.76 | 3.67 | 4.28 | 4.33 | 4.28 |
| | (1.87) | (1.98) | (1.68) | (1.94) | (2.12) | (1.84) |
| Health Insurance (prop.) | 0.58 | 0.43 | 0.65 | 0.61 | 0.56 | 0.64 |
| | (0.49) | (0.50) | (0.48) | (0.49) | (0.50) | (0.48) |
| With children (prop.) | $0.68^{'}$ | $0.90^{'}$ | 0.60 | $0.69^{'}$ | $0.70^{'}$ | $0.69^{'}$ |
| ζ , | (0.47) | (0.30) | (0.49) | (0.46) | (0.46) | (0.46) |
| Number of children | 1.49 | $2.43^{'}$ | 1.14 | $1.56^{'}$ | 1.73 | 1.48 |
| | (1.43) | (1.56) | (1.17) | (1.45) | (1.60) | (1.35) |
| With adults over 70y (prop.) | 0.13 | 0.03 | 0.15 | $0.15^{'}$ | 0.20 | 0.13 |
| <i>(</i> 11) | (0.33) | (0.16) | (0.35) | (0.36) | (0.40) | (0.33) |
| Head of Household | | | | | | |
| Age | 45.7 | 36.4 | 48.0 | 48.3 | 49.5 | 47.7 |
| | (16.1) | (11.8) | (15.9) | (15.3) | (16.8) | (14.5) |
| Female (prop.) | 0.04 | 0.04 | 0.04 | 0.22 | 0.29 | 0.19 |
| | (0.19) | (0.21) | (0.19) | (0.42) | (0.45) | (0.39) |
| Married (prop.) | $0.76^{'}$ | 0.88 | $0.72^{'}$ | $0.76^{'}$ | $0.69^{'}$ | $0.79^{'}$ |
| | (0.43) | (0.33) | (0.45) | (0.43) | (0.46) | (0.40) |
| Schooling (years) | $7.76^{'}$ | $6.68^{'}$ | 8.21 | 7.30 | $5.28^{'}$ | 8.58 |
| . , | (4.42) | (3.60) | (4.64) | (4.46) | (3.86) | (4.34) |
| House characteristics | | | | | | |
| Rooms per person | 0.61 | 0.36 | 0.71 | 0.58 | 0.51 | 0.62 |
| | (0.42) | (0.18) | (0.45) | (0.37) | (0.35) | (0.37) |
| Firm roof (prop.) | 0.76 | 0.54 | 0.86 | 0.80 | 0.51 | 0.97 |
| | (0.42) | (0.50) | (0.34) | (0.40) | (0.50) | (0.17) |
| Firm floor (prop.) | 0.96 | 0.88 | 0.99 | 0.96 | 0.89 | 1.00 |
| | (0.20) | (0.33) | (0.08) | (0.20) | (0.32) | (0.00) |
| Firm walls (prop.) | 0.97 | 0.93 | 0.99 | 0.93 | 0.84 | 0.99 |
| | (0.16) | (0.25) | (0.07) | (0.26) | (0.37) | (0.11) |
| With electricity (prop.) | 0.99 | 0.98 | 1.00 | $0.99^{'}$ | 0.98 | 1.00 |
| V (/ | (0.09) | (0.14) | (0.04) | (0.09) | (0.15) | (0.00) |
| With sewage (prop.) | $0.94^{'}$ | $0.85^{'}$ | $0.99^{'}$ | $0.96^{'}$ | $0.89^{'}$ | 1.00 |
| <u>ت ، </u> | (0.23) | (0.36) | (0.11) | (0.20) | (0.32) | (0.00) |
| With water acces (prop.) | $0.97^{'}$ | 0.92 | 0.99 | 0.98 | 0.94 | 1.00 |
| / | (0.17) | (0.28) | (0.08) | (0.15) | (0.23) | (0.02) |
| Households (N) | 27,981 | 7,243 | 17,148 | 29,349 | 10,758 | 16,948 |

Notes: Sample weighted means with standard deviation in parenthesis below. Low SES corresponds to first index tercile; high SES includes second and third index terciles. Sources: ENSANUT.

Table A.2: Descriptive Statistics on Anthropometric Measures

| | | Male | | | Female | | | |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|--|
| | ENSANUT 2000 | ENSANUT 2006 | <i>p</i> -value | ENSANUT 2000 | ENSANUT 2006 | <i>p</i> -value | | |
| Adults | | | | | | | | |
| Height (cm) | 166.9 | 166.9 | 0.929 | 154.3 | 154.2 | 0.287 | | |
| Weight (kg) | 77.2 | 78.2 | 0.002 | 67.8 | 69.2 | 0.000 | | |
| BMI | 27.5 | 27.9 | 0.000 | 28.3 | 29.0 | 0.000 | | |
| Underweight (%) | 0.8 | 0.8 | 0.963 | 0.9 | 0.7 | 0.098 | | |
| Overweight (%) | 46.1 | 46.2 | 0.875 | 39.0 | 38.1 | 0.250 | | |
| Obesity (%) | 25.7 | 28.2 | 0.012 | 33.5 | 38.5 | 0.000 | | |
| Observations | 3,684 | 4,527 | 8,211 | 7,858 | 7,193 | 15,051 | | |
| Cohorts: 1983-1989 | | | | | | | | |
| Height (cm) | 153.9 | 168.8 | 0.000 | 150.9 | 156.6 | 0.000 | | |
| Weight (kg) | 50.2 | 69.3 | 0.000 | 49.6 | 59.4 | 0.000 | | |
| BMI | 20.8 | 24.3 | 0.000 | 21.5 | 24.1 | 0.000 | | |
| Underweight (%) | 5.7 | 6.2 | 0.479 | 5.8 | 5.4 | 0.544 | | |
| Overweight (%) | 20.5 | 24.8 | 0.000 | 23.8 | 24.4 | 0.633 | | |
| Obesity (%) | 9.2 | 11.1 | 0.021 | 8.7 | 9.0 | 0.647 | | |
| Observations | 3,108 | 2,414 | 5,522 | 3,335 | 2,853 | 6,188 | | |

Notes: Sample weighted means. Adults includes individuals between 25 to 49 years old. Sources: ENSANUT.

Table A.3: Descriptive Statistics on Progresa's Beneficiary Households

| | ENSAN | UT 2000 | | | ENSANUT | 2006 | |
|--------------------------|-------|---------|--------|--------|---------|--------|-------------|
| | R | ural | Ru | ral | Urban | | Mean |
| | Mean | SD | Mean | SD | Mean | SD | Differences |
| Household size | 5.06 | (2.23) | 4.83 | (2.14) | 5.28 | (2.21) | 0.458*** |
| With children (prop.) | 0.84 | (0.37) | 0.81 | (0.40) | 0.88 | (0.33) | 0.070*** |
| Number of children | 2.68 | (1.95) | 2.33 | (1.78) | 2.69 | (1.73) | 0.356*** |
| Head of Household | | | | | | | |
| Age | 45.5 | (15.3) | 47.9 | (15.5) | 45.4 | (14.4) | -2.456*** |
| Female (prop.) | 0.03 | (0.18) | 0.20 | (0.40) | 0.24 | (0.43) | 0.046*** |
| Married (prop.) | 0.86 | (0.35) | 0.83 | (0.37) | 0.79 | (0.41) | -0.047*** |
| Schooling (years) | 4.23 | (2.78) | 4.03 | (3.23) | 4.63 | (3.47) | 0.605*** |
| House characteristics | | | | | | | |
| Rooms per person | 0.39 | (0.27) | 0.43 | (0.26) | 0.37 | (0.21) | -0.059*** |
| Firm roof (prop.) | 0.38 | (0.49) | 0.44 | (0.50) | 0.53 | (0.50) | 0.092*** |
| Firm floor (prop.) | 0.61 | (0.49) | 0.77 | (0.42) | 0.83 | (0.37) | 0.058*** |
| Firm walls (prop.) | 0.91 | (0.28) | 0.79 | (0.41) | 0.87 | (0.34) | 0.073*** |
| With electricity (prop.) | 0.90 | (0.30) | 0.95 | (0.22) | 0.98 | (0.14) | 0.029*** |
| With sewage (prop.) | 0.40 | (0.49) | 0.69 | (0.46) | 0.88 | (0.33) | 0.185*** |
| With water acces (prop.) | 0.62 | (0.49) | 0.81 | (0.40) | 0.95 | (0.23) | 0.139*** |
| Households (N) | 4,195 | | 10,257 | | 3,151 | | 13,408 |

Notes: Sample restricted to urban localities treated after 2000 in ENSANUT. No treated localities on 2003 appear in data. Sources: CONAPO, INEGI, Progresa Administrative Records, Ministry of Health, ENSANUT.

Table A.4: Baseline Characteristics for Urban Localities (ENSANUT Sample)

| | | Means in 2000 | by Year of First | Treatment | |
|----------------------------|------|---------------|------------------|-----------|-------|
| | (1) | (2) | (3) | (4) | (5) |
| | 2001 | 2002 | 2004 | 2005 | After |
| Marginality (percentile) | 54.9 | 34.3 | 25.6 | 24.9 | 4.9 |
| Social Lag (percentile) | 53.5 | 34.0 | 29.3 | 29.7 | 4.9 |
| Population (1000s) | 17.2 | 129.2 | 341.5 | 174.1 | 688.1 |
| Households (1000s) | 4.0 | 31.5 | 78.7 | 41.8 | 176.7 |
| Female Head of HH (%) | 17.8 | 18.6 | 16.4 | 16.6 | 24.3 |
| Children 6-17y (%) | 27.5 | 26.2 | 25.2 | 24.3 | 19.7 |
| Children not in school (%) | 16.5 | 14.6 | 13.4 | 11.3 | 8.8 |
| Illiteracy Rate (%) | 9.4 | 6.8 | 5.0 | 4.5 | 2.4 |
| No Health Insurance (%) | 62.3 | 50.8 | 50.5 | 57.6 | 45.9 |
| Physicians per 10k | 9.4 | 7.4 | 6.4 | 10.5 | 15.0 |
| Clinics per 100k | 11.8 | 6.7 | 7.6 | 5.8 | 2.3 |
| Localities $(N = 427)$ | 181 | 175 | 54 | 9 | 10 |

Notes: Sample restricted to urban localities treated after 2000 in ENSANUT. No treated localities on 2003 appear in data. Sources: CONAPO, INEGI, Progresa Administrative Records, Ministry of Health, ENSANUT.

Table A.5: Descriptive Statistics in 2000 by Progresa's Scale-up Phase and Type of Locality

| | | | Uı | ban | | | | | Ru | ral | | |
|------------------------------------|--------------------------------|--------------------------|-------|------------------------------|-------|--------------------------|-------------|--------------------------|-------------|--------------------------|--------|--------------------------|
| | (1) (2) 1999-2000 2001-2005 | | | (3) (4) After 2006 1999-2 | | | (5 2001- | | (6 After | , | | |
| | Mean | $\overline{\mathrm{SD}}$ | Mean | $\overline{\mathrm{SD}}$ | Mean | $\overline{\mathrm{SD}}$ | Mean | $\overline{\mathrm{SD}}$ | Mean | $\overline{\mathrm{SD}}$ | Mean | $\overline{\mathrm{SD}}$ |
| Mun. Marginality | 56.2 | 21.0 | 32.5 | 21.1 | 5.9 | 6.9 | 57.5 | 24.4 | 51.7 | 28.6 | 55.1 | 29.4 |
| Population (1000s) | 9.7 | 13.8 | 50.3 | 142.0 | 387.0 | 482.4 | 0.40 | 0.63 | 0.36 | 0.84 | 0.09 | 0.26 |
| Households (100s) | 21.1 | 34.7 | 118.2 | 334.4 | 991.4 | 1178.2 | 0.84 | 1.36 | 0.81 | 1.90 | 0.19 | 0.57 |
| Members per house | 4.7 | 0.5 | 4.3 | 0.4 | 4.1 | 0.7 | 4.7 | 0.9 | 4.7 | 1.2 | 4.6 | 1.3 |
| Pop. Density | 3.1 | 4.2 | 2.8 | 7.8 | 0.1 | 0.1 | 5.5 | 11.1 | 7.0 | 16.1 | 7.6 | 19.4 |
| Female (%) | 51.2 | 1.3 | 51.5 | 1.2 | 49.5 | 11.5 | 50.2 | 5.3 | 49.6 | 7.1 | 48.7 | 8.5 |
| Children 6-17y (%) | 30.0 | 2.8 | 27.2 | 2.5 | 21.1 | 6.8 | 30.5 | 7.6 | 28.3 | 10.1 | 27.4 | 11.7 |
| Illiteracy Rate (%) | 19.3 | 10.5 | 9.1 | 5.1 | 5.6 | 9.4 | 22.6 | 15.0 | 21.5 | 18.8 | 25.3 | 22.2 |
| Schooling (years) | 5.5 | 1.3 | 7.2 | 1.2 | 8.8 | 2.2 | 4.2 | 1.3 | 4.4 | 1.9 | 4.1 | 2.0 |
| No Healthcare (%) | 80.1 | 16.3 | 61.2 | 17.3 | 52.6 | 20.3 | 86.4 | 20.4 | 81.7 | 24.0 | 82.6 | 26.7 |
| Physicians per 100k | 43.1 | 47.6 | 60.0 | 71.9 | 66.1 | 101.7 | 21.4 | 152.5 | 25.0 | 533.1 | 6.9 | 160.5 |
| Clinics per 100k | 10.9 | 9.2 | 10.3 | 10.5 | 2.3 | 3.1 | 18.9 | 135.6 | 17.2 | 220.0 | 6.5 | 157.4 |
| Hospitals per million | 4.8 | 21.7 | 8.6 | 25.2 | 2.9 | 4.2 | 0.3 | 16.6 | 1.9 | 151.0 | 0.4 | 41.1 |
| $Geographic\ Region$ | | | | | | | | | | | | |
| North (%) | 17.3 | 38.0 | 18.7 | 39.0 | 5.6 | 23.6 | 18.7 | 39.0 | 24.1 | 42.8 | 28.4 | 45.1 |
| Center (%) | 39.8 | 49.1 | 53.9 | 49.9 | 94.4 | 23.6 | 41.2 | 49.2 | 43.6 | 49.6 | 26.7 | 44.2 |
| South (%) | 42.9 | 49.7 | 27.5 | 44.6 | 0.0 | 0.0 | 40.1 | 49.0 | 32.3 | 46.8 | 45.0 | 49.7 |
| $\overline{\text{Localities }(N)}$ | 134 | | 1,154 | | 18 | | 18,351 | | 26,945 | | 17,699 | |

Notes: Means and standard deviations by locality. Urban localities have 5,000 inhabitants or more. Municipality marginality index expressed in percentiles, population density refers to mean by municipality. Sources: CONAPO, INEGI, Progresa Administrative Records, Ministry of Health.

Table A.6: Intent-to-Treat Effects on Anthropometric Measures (Cohorts: 1983-1989)

| | Heigh | t (cm) | Weigl | ht (kg) | В | SMI |
|--|---------------------|----------------------|---------------------|-----------------------|---------------------|-----------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| Years Treated | 0.875*** (0.254) | 0.216 (0.242) | 1.246*** (0.447) | 0.279 (0.477) | 0.222 (0.175) | 0.108 (0.180) |
| SES Index | 0.052*** (0.020) | 0.023 (0.016) | $0.057* \\ (0.033)$ | 0.083*** (0.028) | 0.015 (0.011) | 0.027** (0.010) |
| (SES Index) 2 | -0.0001 (0.0002) | $0.0000 \\ (0.0002)$ | -0.0002 (0.0004) | -0.0007** (0.0003) | -0.0001 (0.0001) | -0.0003** (0.0001) |
| Locality Controls | | | | | | |
| Marginality (percentile) | $0.001 \\ (0.014)$ | -0.026** (0.012) | 0.021 (0.019) | -0.006 (0.015) | 0.010 (0.007) | 0.004 (0.007) |
| Children 6-17y (%) | -0.266** (0.118) | -0.151 (0.109) | -0.388* (0.205) | -0.263* (0.157) | -0.105 (0.084) | -0.056 (0.067) |
| Physicians per 1000s | $0.063 \\ (0.195)$ | -0.237 (0.221) | 0.067 (0.308) | -0.170 (0.232) | $0.068 \\ (0.105)$ | 0.024 (0.123) |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \ \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV Observations | 154.0 5,254 | 150.9 5,913 | 50.3 5,298 | 49.5 5,823 | 20.8 5,242 | 21.5 5,760 |
| $\frac{R^2}{R^2}$ | 0.678 | 0.388 | 0.462 | 0.268 | 0.210 | 0.160 |

Table A.7: Intent-to-Treat Effects on BMI Categories (Cohorts: 1983-1989)

| | Under | weight | Over | weight | Obe | esity |
|--|------------------------|------------------------|-----------------------|-------------------------|------------------------|-----------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| Years Treated | -0.0006 (0.0127) | 0.0105 (0.0118) | 0.0240 (0.0184) | 0.0367* (0.0190) | 0.0157 (0.0107) | 0.0219 (0.0144) |
| SES Index | -0.0009 (0.0010) | -0.0006 (0.0007) | $0.0006 \\ (0.0013)$ | 0.0026** (0.0011) | -0.0000 (0.0008) | $0.0012* \\ (0.0007)$ |
| (SES Index) 2 | $0.00001 \\ (0.00001)$ | $0.00001 \\ (0.00001)$ | -0.00000 (0.00001) | -0.00003** (0.00001) | $0.00000 \\ (0.00001)$ | -0.00001 (0.00001) |
| Locality Controls | | | | | | |
| Marginality (percentile) | -0.0001 (0.0005) | 0.0009 (0.0007) | 0.0007 (0.0008) | 0.0007 (0.0007) | 0.0004 (0.0005) | 0.0010** (0.0005) |
| Children 6-17y (%) | -0.0087** (0.0038) | -0.0018 (0.0049) | -0.0133 (0.0098) | 0.0011 (0.0063) | -0.0092 (0.0058) | -0.0070 (0.0056) |
| Physicians per 1000s | -0.0002 (0.0094) | 0.0053 (0.0065) | -0.0023 (0.0120) | -0.0070 (0.0113) | 0.0094 (0.0090) | -0.0140 (0.0088) |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \ \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV Observations | 0.064 3,517 | 0.055 3,886 | 0.330 4,977 | 0.341 5,520 | 0.095 3,679 | 0.070 3,964 |
| $\frac{R^2}{R^2}$ | 0.032 | 0.039 | 0.047 | 0.041 | 0.058 | 0.092 |

Table A.8: Intent-to-Treat Effects on Boys' Height

| | Boys' Height (cm) | | | | | | | | |
|---|-------------------|--------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Years Treated | 0.470 (0.400) | 0.456 (0.396) | 0.590 (0.374) | 0.590* (0.353) | 0.745** (0.318) | 0.757** (0.313) | 0.732** (0.314) | 0.733** (0.310) | |
| Age | | 1.092** (0.508) | | | | | | | |
| SES Index (percentile) | | | 0.054*** (0.008) | 0.051*** (0.008) | 0.051*** (0.008) | 0.039 (0.027) | 0.044*** (0.008) | 0.044* (0.026) | |
| (SES Index) 2 | | | | | | 0.0001 (0.0003) | | $0.0000 \\ (0.0003)$ | |
| Mother's Educ \geq 6y | | | | | | | 1.408*** (0.418) | 1.405*** (0.412) | |
| Locality Controls | | | | | | | | | |
| Marginality (percentile) | | | | -0.018 (0.013) | 0.038** (0.017) | 0.038** (0.017) | 0.041** (0.017) | 0.041** (0.017) | |
| Children 6-17y (%) | | | | -0.072 (0.138) | -0.460*** (0.154) | -0.459*** (0.154) | -0.454*** (0.153) | -0.454*** (0.153) | |
| Physicians per 1000s | | | | 0.523 (0.421) | 0.455 (0.371) | $0.461 \\ (0.370)$ | 0.448 (0.374) | 0.448 (0.372) | |
| State FE | no | no | no | no | yes | yes | yes | yes | |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes | |
| Mean DV | 144.1 | 144.1 | 144.1 | 144.1 | 144.1 | 144.1 | 144.1 | 144.1 | |
| Observations R^2 | 2,702 0.743 | 2,702 0.744 | 2,702 0.753 | 2,702 0.755 | 2,702 0.766 | 2,702 0.766 | 2,702 0.768 | 2,702 0.768 | |

Table A.9: Intent-to-Treat Effects on Boys' Standardized Height for Age

| | Boys' Height-for-Age $(z	ext{-score})$ | | | | | | | | | |
|---|--|---------------------|---------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|--|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | | |
| Years Treated | 0.055 (0.056) | 0.057 (0.056) | 0.071 (0.052) | 0.071 (0.049) | 0.090** (0.044) | 0.091** (0.043) | 0.088** (0.044) | 0.087** (0.043) | | |
| Age | | -0.141** (0.065) | | | | | | | | |
| SES Index (percentile) | | | 0.007*** (0.001) | 0.007*** (0.001) | $0.007*** \\ (0.001)$ | $0.006 \\ (0.004)$ | 0.006*** (0.001) | 0.007* (0.004) | | |
| (SES Index) 2 | | | | | | $0.0000 \\ (0.0000)$ | | -0.0000 (0.0000) | | |
| Mother's Educ \geq 6y | | | | | | | 0.199*** (0.055) | 0.201*** (0.054) | | |
| Locality Controls | | | | | | | | | | |
| Marginality (percentile) | | | | -0.002 (0.002) | 0.005** (0.002) | 0.005** (0.002) | 0.006** (0.002) | 0.006** (0.002) | | |
| Children 6-17y (%) | | | | -0.019 (0.020) | -0.069*** (0.021) | -0.069*** (0.021) | -0.069*** (0.021) | -0.069*** (0.021) | | |
| Physicians per 1000s | | | | 0.070 (0.046) | 0.058 (0.041) | 0.058 (0.041) | 0.057 (0.041) | 0.057 (0.041) | | |
| State FE | no | no | no | no | yes | yes | yes | yes | | |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes | | |
| Mean DV | -0.34 | -0.34 | -0.34 | -0.34 | -0.34 | -0.34 | -0.34 | -0.34 | | |
| Observations R ² | $2,702 \\ 0.085$ | 2,702 0.087 | $2,702 \\ 0.120$ | 2,702 0.129 | 2,702 0.168 | 2,702 0.168 | $2,702 \\ 0.175$ | $2,702 \\ 0.175$ | | |

Table A.10: Intent-to-Treat Effects on Girls' Height

| | Girls' Height (cm) | | | | | | | | |
|---|--------------------|---------------------|---------------------|----------------------|----------------------|----------------------|---------------------|---------------------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Years Treated | 0.446 (0.284) | 0.390 (0.283) | 0.478* (0.278) | 0.434 (0.269) | 0.454* (0.266) | 0.448* (0.267) | 0.448* (0.264) | 0.431 (0.263) | |
| Age | | 1.604*** (0.435) | | | | | | | |
| SES Index (percentile) | | | 0.038*** (0.007) | 0.024*** (0.006) | 0.023*** (0.006) | 0.030 (0.022) | 0.017*** (0.006) | 0.039* (0.021) | |
| (SES Index) 2 | | | | | | -0.0001 (0.0002) | | -0.0002 (0.0002) | |
| Mother's Educ \geq 6y | | | | | | | 1.606*** (0.412) | 1.664*** (0.418) | |
| Locality Controls | | | | | | | | | |
| Marginality (percentile) | | | | -0.069*** (0.012) | -0.038*** (0.015) | -0.038*** (0.014) | -0.034** (0.014) | -0.033** (0.014) | |
| Children 6-17y (%) | | | | 0.127 (0.107) | -0.109 (0.143) | -0.108 (0.144) | -0.109 (0.139) | -0.104 (0.139) | |
| Physicians per 1000s | | | | -0.141 (0.260) | -0.139 (0.279) | -0.135 (0.279) | -0.151 (0.265) | -0.140 (0.265) | |
| State FE | no | no | no | no | yes | yes | yes | yes | |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes | |
| Mean DV | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | |
| Observations \mathbb{R}^2 | 2,960 0.444 | 2,960 0.448 | $2,960 \\ 0.456$ | $2,960 \\ 0.472$ | 2,960 0.493 | 2,960 0.493 | 2,960 0.499 | 2,960 0.499 | |

Table A.11: Intent-to-Treat Effects on Girls' Standardized Height for Age

| | Girls' Height-for-Age $(z	ext{-score})$ | | | | | | | | |
|---|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Years Treated | 0.047 (0.043) | 0.049 (0.043) | 0.052 (0.042) | 0.045 (0.041) | 0.044 (0.040) | 0.043 (0.040) | 0.043 (0.040) | 0.041 (0.040) | |
| Age | | -0.049 (0.063) | | | | | | | |
| SES Index (percentile) | | | 0.005*** (0.001) | 0.003*** (0.001) | 0.003*** (0.001) | 0.004 (0.003) | 0.002*** (0.001) | $0.005 \\ (0.003)$ | |
| (SES Index) 2 | | | | | | -0.0000 (0.0000) | | -0.0000 (0.0000) | |
| Mother's Educ \geq 6y | | | | | | | 0.233*** (0.062) | 0.240*** (0.063) | |
| Locality Controls | | | | | | | | | |
| Marginality (percentile) | | | | -0.010*** (0.002) | -0.006** (0.002) | -0.006*** (0.002) | -0.005** (0.002) | -0.005** (0.002) | |
| Children 6-17y (%) | | | | 0.012 (0.016) | -0.020 (0.021) | -0.020 (0.022) | -0.020 (0.021) | -0.019 (0.021) | |
| Physicians per 1000s | | | | -0.031 (0.039) | -0.027 (0.042) | -0.027 (0.042) | -0.029 (0.040) | -0.028 (0.040) | |
| State FE | no | no | no | no | yes | yes | yes | yes | |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes | |
| Mean DV Observations R ² | -0.31 2,960 0.112 | -0.31 2,960 0.112 | -0.31 2,960 0.131 | -0.31 2,960 0.161 | -0.31 2,960 0.191 | -0.31 2,960 0.191 | -0.31 2,960 0.201 | -0.31 2,960 0.201 | |

Table A.12: Intent-to-Treat Effects on Boys' Weight

| | Boys' Weight (kg) | | | | | | | | |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Years Treated | 0.976** (0.447) | 0.961** (0.439) | 1.070** (0.441) | 1.077** (0.427) | 1.205*** (0.411) | 1.170*** (0.413) | 1.194*** (0.415) | 1.146*** (0.418) | |
| Age | | 1.165 (0.803) | | | | | | | |
| SES Index (percentile) | | | 0.044*** (0.011) | 0.041*** (0.011) | 0.044*** (0.011) | 0.078** (0.038) | 0.038*** (0.011) | 0.083** (0.038) | |
| (SES Index) 2 | | | | | | -0.0004 (0.0004) | | -0.0005 (0.0004) | |
| Mother's Educ \geq 6y | | | | | | | 1.213** (0.539) | 1.327** (0.542) | |
| Locality Controls | | | | | | | | | |
| Marginality (percentile) | | | | -0.008 (0.019) | 0.038 (0.025) | 0.038 (0.025) | 0.041 (0.025) | 0.041 (0.025) | |
| Children 6-17y (%) | | | | -0.172 (0.165) | -0.295 (0.214) | -0.296 (0.214) | -0.289 (0.212) | -0.290 (0.212) | |
| Physicians per 1000s | | | | 0.263 (0.362) | 0.295 (0.329) | 0.280 (0.331) | 0.288 (0.327) | 0.268 (0.329) | |
| State FE | no | no | no | no | yes | yes | yes | yes | |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | |
| Mean DV Observations R ² | 41.7 2,726 0.538 | 41.7 2,726 0.539 | 41.7 2,726 0.543 | 41.7 2,726 0.544 | 41.7 2,726 0.555 | 41.7 2,726 0.555 | 41.7 2,726 0.556 | 41.7 2,726 0.556 | |

Table A.13: Intent-to-Treat Effects on Boys' Standardized Weight for Age

| | | | Во | ys' Weight- | for-Age $(z-$ | score) | | |
|---|------------------|--------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.066 (0.054) | 0.068 (0.055) | 0.077 (0.054) | 0.079 (0.050) | 0.096** (0.048) | 0.092* (0.048) | 0.094* (0.048) | 0.089* (0.048) |
| Age | | -0.135* (0.074) | | | | | | |
| SES Index (percentile) | | | 0.005*** (0.001) | 0.005*** (0.001) | 0.005*** (0.001) | 0.009** (0.004) | 0.004*** (0.001) | 0.009** (0.004) |
| (SES Index) 2 | | | | | | -0.0000 (0.0000) | | -0.0001 (0.0000) |
| Mother's Educ \geq 6y | | | | | | | 0.143*** (0.054) | 0.156*** (0.054) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.000 (0.002) | 0.005* (0.003) | $0.005* \\ (0.003)$ | 0.005** (0.003) | 0.005** (0.003) |
| Children 6-17y (%) | | | | -0.033* (0.018) | -0.047** (0.023) | -0.047** (0.023) | -0.046** (0.023) | -0.046** (0.023) |
| Physicians per 1000s | | | | 0.046 (0.033) | 0.039 (0.029) | 0.037 (0.029) | 0.038 (0.029) | 0.036 (0.029) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Observations \mathbb{R}^2 | $2,700 \\ 0.024$ | 2,700 0.026 | $2,700 \\ 0.036$ | 2,700 0.041 | 2,700 0.067 | 2,700 0.068 | 2,700 0.070 | 2,700 0.071 |

Table A.14: Intent-to-Treat Effects on Girls' Weight

| | | | | Girls' | Weight (kg | g) | | |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | -0.005 (0.579) | -0.069 (0.577) | 0.020 (0.582) | 0.009 (0.578) | 0.070 (0.571) | -0.018 (0.574) | 0.065 (0.571) | -0.035 (0.574) |
| Age | | 1.533** (0.676) | | | | | | |
| SES Index (percentile) | | | 0.037*** (0.014) | 0.028** (0.014) | $0.026* \\ (0.014)$ | 0.129*** (0.037) | 0.021 (0.014) | 0.136*** (0.036) |
| (SES Index) 2 | | | | | | -0.0012*** (0.0004) | | -0.0013*** (0.0004) |
| Mother's Educ \geq 6y | | | | | | | 1.216 (0.797) | 1.517* (0.773) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.038** (0.019) | $0.000 \\ (0.025)$ | $0.005 \\ (0.025)$ | 0.003 (0.024) | 0.010 (0.024) |
| Children 6-17y (%) | | | | -0.007 (0.209) | -0.349 (0.279) | -0.328 (0.281) | -0.350 (0.279) | -0.327 (0.280) |
| Physicians per 1000s | | | | 0.491 (0.351) | 0.518 (0.397) | 0.576 (0.400) | $0.508 \\ (0.388)$ | 0.572 (0.388) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes |
| Mean DV Observations R ² | 42.8 2,929 0.332 | 42.8 2,929 0.334 | 42.8 2,929 0.337 | 42.8 2,929 0.340 | 42.8 2,929 0.354 | 42.8 2,929 0.358 | 42.8 2,929 0.356 | 42.8 2,929 0.360 |

Table A.15: Intent-to-Treat Effects on Girls' Standardized Weight for Age

| | | | (| Girls' Wei | ght-for-Age | (z-score) | | |
|---|------------------|------------------|---------------------|--------------------|----------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.046 (0.043) | 0.046 (0.043) | 0.050 (0.043) | 0.046 (0.043) | 0.052 (0.041) | 0.044 (0.041) | 0.051 (0.041) | 0.043 (0.041) |
| Age | | -0.007 (0.062) | | | | | | |
| SES Index (percentile) | | | 0.004*** (0.001) | 0.003** (0.001) | 0.003** (0.001) | 0.013*** (0.003) | 0.003** (0.001) | 0.014*** (0.003) |
| (SES Index) 2 | | | | | | -0.0001*** (0.0000) | | -0.0001*** (0.0000) |
| Mother's Educ \geq 6y | | | | | | | $0.059 \\ (0.069)$ | 0.089 (0.067) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.003* (0.002) | 0.001 (0.002) | 0.002 (0.002) | 0.001 (0.002) | 0.002 (0.002) |
| Children 6-17y (%) | | | | -0.027 (0.017) | -0.063*** (0.022) | -0.061*** (0.023) | -0.063*** (0.022) | -0.061*** (0.022) |
| Physicians per 1000s | | | | $0.035 \\ (0.033)$ | $0.040 \\ (0.036)$ | 0.045 (0.037) | 0.039 (0.036) | $0.045 \\ (0.036)$ |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Observations R^2 | 2,910 0.022 | 2,910 0.022 | 2,910 0.031 | 2,910 0.041 | 2,910 0.059 | $2,910 \\ 0.064$ | 2,910 0.060 | $2,910 \\ 0.065$ |

Table A.16: Intent-to-Treat Effects on Boys' BMI

| | | | | Boy | s' BMI | | | |
|---|-----------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.205 (0.152) | 0.202 (0.150) | 0.216 (0.152) | 0.221 (0.149) | 0.247 (0.151) | 0.227 (0.148) | 0.246 (0.152) | 0.224 (0.149) |
| Age | | 0.240 (0.264) | | | | | | |
| SES Index (percentile) | | | $0.005 \\ (0.004)$ | $0.005 \\ (0.004)$ | $0.005 \\ (0.004)$ | 0.025* (0.015) | $0.005 \\ (0.004)$ | 0.026* (0.015) |
| (SES Index) 2 | | | | | | -0.0002 (0.0002) | | -0.0002 (0.0002) |
| Mother's Educ \geq 6y | | | | | | | 0.093 (0.179) | 0.147 (0.180) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.002 (0.006) | $0.008 \\ (0.008)$ | $0.008 \\ (0.008)$ | $0.008 \\ (0.008)$ | $0.008 \\ (0.008)$ |
| Children 6-17y (%) | | | | -0.068 (0.055) | -0.038 (0.076) | -0.039 (0.076) | -0.038 (0.076) | -0.038 (0.076) |
| Physicians per 1000s | | | | 0.024 (0.111) | 0.030 (0.120) | 0.021 (0.119) | 0.029 (0.120) | 0.020 (0.119) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 |
| Observations \mathbb{R}^2 | 2,697 0.199 | 2,697 0.199 | 2,697 0.200 | 2,697 0.200 | 2,697 0.215 | 2,697 0.216 | 2,697 0.215 | 2,697 0.216 |

Table A.17: Intent-to-Treat Effects on Boys' Standardized BMI for Age

| | | | Во | oys' BMI-fo | or-Age (z -s | core) | | |
|---|-----------------|------------------|--------------------|--------------------|--------------------|---------------------|--------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.031 (0.051) | 0.032 (0.052) | 0.033 (0.051) | 0.037 (0.049) | 0.048 (0.049) | 0.044 (0.048) | 0.048 (0.050) | 0.043 (0.048) |
| Age | | -0.079 (0.070) | | | | | | |
| SES Index (percentile) | | | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | $0.006 \\ (0.005)$ | $0.001 \\ (0.001)$ | $0.006 \\ (0.005)$ |
| (SES Index) 2 | | | | | | -0.0001 (0.0001) | | -0.0001 (0.0001) |
| Mother's Educ \geq 6y | | | | | | | 0.026 (0.053) | 0.038 (0.052) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.002 (0.002) | 0.004 (0.002) | 0.004 (0.002) | 0.004 (0.002) | 0.004 (0.002) |
| Children 6-17y (%) | | | | -0.029* (0.016) | -0.012 (0.021) | -0.013 (0.021) | -0.012 (0.021) | -0.012 (0.021) |
| Physicians per 1000s | | | | 0.010 (0.037) | 0.010 (0.040) | $0.008 \\ (0.039)$ | 0.010 (0.040) | 0.008 (0.039) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 |
| Observations R ² | 2,697 0.014 | 2,697 0.014 | 2,697 0.014 | 2,697 0.016 | 2,697 0.035 | 2,697 0.036 | 2,697 0.035 | 2,697 0.036 |

Table A.18: Intent-to-Treat Effects on Girls' BMI

| | | | | C | Girls' BMI | | | |
|---|-------------------|--------------------|--------------------|--------------------|--------------------|------------------------|--------------------|-------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | -0.009 (0.213) | -0.018 (0.213) | -0.003 (0.215) | -0.004 (0.210) | 0.027 (0.206) | -0.006 (0.208) | 0.027 (0.206) | -0.006 (0.208) |
| Age | | $0.272 \\ (0.249)$ | | | | | | |
| SES Index (percentile) | | | $0.006 \\ (0.005)$ | $0.005 \\ (0.005)$ | $0.005 \\ (0.005)$ | 0.047*** (0.014) | $0.006 \\ (0.005)$ | 0.047^{***} (0.014) |
| (SES Index) 2 | | | | | | -0.0005*** (0.0002) | | -0.0005*** (0.0002) |
| Mother's Educ \geq 6y | | | | | | | -0.099 (0.304) | 0.014 (0.296) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.003 (0.007) | 0.014 (0.009) | 0.017* (0.009) | 0.014 (0.009) | $0.017* \\ (0.009)$ |
| Children 6-17y (%) | | | | -0.079 (0.071) | -0.168* (0.101) | -0.159 (0.103) | -0.168* (0.101) | -0.159 (0.103) |
| Physicians per 1000s | | | | 0.252** (0.106) | 0.282** (0.119) | 0.304*** (0.117) | 0.283** (0.119) | 0.304*** (0.117) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| Observations R^2 | 2,907 0.185 | 2,907 0.186 | 2,907 0.186 | 2,907 0.189 | 2,907 0.202 | 2,907 0.207 | 2,907 0.202 | 2,907 0.207 |

Table A.19: Intent-to-Treat Effects on Girls' Standardized BMI for Age $\,$

| | | | | Girls' BM | II-for-Age (| z-score) | | |
|---|------------------|--------------------|--------------------|---------------------|---------------------|------------------------|---------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.041 (0.039) | 0.041 (0.039) | 0.042 (0.040) | 0.041 (0.039) | 0.047 (0.039) | 0.040 (0.038) | 0.047 (0.038) | 0.040 (0.038) |
| Age | | $0.001 \\ (0.057)$ | | | | | | |
| SES Index (percentile) | | | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | 0.011*** (0.003) | 0.002 (0.001) | 0.010*** (0.003) |
| (SES Index) 2 | | | | | | -0.0001*** (0.0000) | | -0.0001*** (0.0000) |
| Mother's Educ \geq 6y | | | | | | | -0.051 (0.060) | -0.027 (0.060) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.002 (0.002) | 0.004* (0.002) | 0.004* (0.002) | 0.003 (0.002) | 0.004* (0.002) |
| Children 6-17y (%) | | | | -0.033** (0.014) | -0.049** (0.019) | -0.047** (0.020) | -0.049** (0.019) | -0.047** (0.020) |
| Physicians per 1000s | | | | 0.047^* (0.025) | 0.052* (0.027) | 0.057** (0.026) | 0.052** (0.027) | 0.057** (0.026) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 |
| Observations \mathbb{R}^2 | 2,907 0.016 | 2,907 0.016 | 2,907 0.017 | 2,907 0.022 | 2,907 0.038 | 2,907 0.044 | 2,907 0.039 | 2,907 0.044 |

Table A.20: Intent-to-Treat Effects on Boys' Underweight Prevalence

| | | | | Boys' U | nderweight | ; | | |
|---|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|----------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0089 (0.0203) | 0.0091 (0.0203) | 0.0095 (0.0200) | 0.0089 (0.0197) | 0.0032 (0.0205) | 0.0053 (0.0195) | 0.0029 (0.0207) | 0.0053 (0.0196) |
| Age | | -0.0132 (0.0165) | | | | | | |
| SES Index (percentile) | | | 0.0002 (0.0004) | 0.0002 (0.0004) | 0.0002 (0.0004) | -0.0021 (0.0016) | $0.0001 \\ (0.0004)$ | -0.0021 (0.0016) |
| (SES Index) 2 | | | | | | 0.00003 (0.00002) | | 0.00003 (0.00002) |
| Mother's Educ \geq 6y | | | | | | | $0.0060 \\ (0.0219)$ | -0.0002 (0.0196) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0004 (0.0006) | -0.0002 (0.0008) | -0.0002 (0.0008) | -0.0002 (0.0008) | -0.0002 (0.0008) |
| Children 6-17y (%) | | | | 0.0010 (0.0052) | -0.0067 (0.0052) | -0.0070 (0.0051) | -0.0067 (0.0051) | -0.0070 (0.0051) |
| Physicians per 1000s | | | | -0.0061 (0.0144) | -0.0047 (0.0117) | -0.0035 (0.0114) | -0.0047 (0.0118) | -0.0035 (0.0115) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.066 | 0.066 | 0.066 | 0.066 | 0.066 | 0.066 | 0.066 | 0.066 |
| Observations R^2 | $1,792 \\ 0.021$ | $1,792 \\ 0.022$ | $1,792 \\ 0.022$ | $1,792 \\ 0.022$ | 1,792 0.048 | 1,792 0.053 | 1,792 0.048 | 1,792 0.053 |

Table A.21: Intent-to-Treat Effects on Girls' Underweight Prevalence

| | | | | Girls' Ur | nderweight | | | |
|---|---------------------|---------------------|----------------------|-----------------------|---------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | -0.0042 (0.0107) | -0.0037 (0.0103) | -0.0042 (0.0105) | -0.0037 (0.0106) | -0.0032 (0.0107) | -0.0024 (0.0106) | -0.0037 (0.0107) | -0.0029 (0.0107) |
| Age | | -0.0118 (0.0168) | | | | | | |
| SES Index (percentile) | | | $0.0003 \\ (0.0003)$ | 0.0002 (0.0003) | 0.0001 (0.0003) | -0.0009 (0.0009) | $0.0000 \\ (0.0003)$ | -0.0008 (0.0009) |
| (SES Index) 2 | | | | | | $0.00001 \\ (0.00001)$ | | $0.00001 \\ (0.00001)$ |
| Mother's Educ \geq 6y | | | | | | | 0.0194 (0.0157) | 0.0171 (0.0150) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0009** (0.0004) | -0.0000 (0.0006) | -0.0001 (0.0006) | $0.0000 \\ (0.0006)$ | -0.0001 (0.0006) |
| Children 6-17y (%) | | | | $0.0070* \\ (0.0039)$ | 0.0003 (0.0058) | 0.0001 (0.0058) | 0.0003 (0.0057) | $0.0001 \\ (0.0058)$ |
| Physicians per 1000s | | | | -0.0001 (0.0066) | 0.0038 (0.0053) | 0.0036 (0.0052) | $0.0040 \\ (0.0050)$ | 0.0037 (0.0050) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.067 | 0.067 | 0.067 | 0.067 | 0.067 | 0.067 | 0.067 | 0.067 |
| Observations R^2 | 2,022 0.005 | 2,022 0.006 | 2,022 0.007 | 2,022 0.011 | 2,022 0.029 | 2,022 0.030 | 2,022 0.030 | 2,022 0.031 |

Table A.22: Intent-to-Treat Effects on Boys' Overweight Prevalence

| | | | | Boys' C | verweight | | | |
|---|-------------------|--------------------|----------------------|----------------------|----------------------|-----------------------|---------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0005 (0.0193) | 0.0006 (0.0194) | 0.0013 (0.0195) | 0.0022 (0.0193) | -0.0003 (0.0200) | -0.0022 (0.0194) | -0.0000 (0.0200) | -0.0020 (0.0195) |
| Age | | -0.0230 (0.0281) | | | | | | |
| SES Index (percentile) | | | $0.0005 \\ (0.0005)$ | $0.0006 \\ (0.0006)$ | $0.0006 \\ (0.0005)$ | $0.0030* \\ (0.0015)$ | 0.0007 (0.0005) | 0.0029* (0.0015) |
| (SES Index) 2 | | | | | | -0.00003 (0.00002) | | -0.00003 (0.00002) |
| Mother's Educ \geq 6y | | | | | | | -0.0179 (0.0260) | -0.0129 (0.0257) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | $0.0008 \\ (0.0008)$ | 0.0014 (0.0011) | 0.0014 (0.0011) | 0.0014 (0.0011) | 0.0014 (0.0011) |
| Children 6-17y (%) | | | | -0.0066 (0.0063) | -0.0106 (0.0090) | -0.0105 (0.0089) | -0.0106 (0.0090) | -0.0105 (0.0089) |
| Physicians per 1000s | | | | 0.0056 (0.0187) | 0.0094 (0.0154) | 0.0087 (0.0153) | 0.0096 (0.0154) | 0.0088 (0.0153) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.317 | 0.317 | 0.317 | 0.317 | 0.317 | 0.317 | 0.317 | 0.317 |
| Observations R^2 | 2,339 0.009 | $2,339 \\ 0.010$ | $2,339 \\ 0.010$ | 2,339 0.011 | 2,339 0.032 | 2,339 0.034 | 2,339 0.032 | $2,339 \\ 0.034$ |

Table A.23: Intent-to-Treat Effects on Girls' Overweight Prevalence

| | | | | Girls' | Overweigh | nt | | |
|---|--------------------|--------------------|----------------------|----------------------|----------------------|-------------------------|---------------------|-------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0166 (0.0196) | 0.0175 (0.0197) | 0.0173 (0.0195) | 0.0173 (0.0195) | 0.0174 (0.0186) | 0.0149 (0.0184) | 0.0173 (0.0186) | 0.0145 (0.0184) |
| Age | | -0.0295 (0.0261) | | | | | | |
| SES Index (percentile) | | | $0.0005 \\ (0.0005)$ | $0.0005 \\ (0.0005)$ | $0.0005 \\ (0.0005)$ | 0.0033** (0.0014) | 0.0004 (0.0005) | 0.0034** (0.0014) |
| (SES Index) 2 | | | | | | -0.00003** (0.00002) | | -0.00003** (0.00002) |
| Mother's Educ \geq 6y | | | | | | | 0.0181 (0.0258) | 0.0259 (0.0258) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0002 (0.0007) | 0.0013 (0.0009) | 0.0014 (0.0010) | 0.0013 (0.0009) | 0.0015 (0.0010) |
| Children 6-17y (%) | | | | -0.0018 (0.0065) | -0.0106 (0.0076) | -0.0098 (0.0076) | -0.0106 (0.0076) | -0.0097 (0.0076) |
| Physicians per 1000s | | | | 0.0114 (0.0099) | 0.0192* (0.0100) | 0.0206** (0.0100) | 0.0190* (0.0101) | 0.0204** (0.0101) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.285 | 0.285 | 0.285 | 0.285 | 0.285 | 0.285 | 0.285 | 0.285 |
| Observations R^2 | 2,647 0.017 | 2,647 0.017 | 2,647 0.018 | 2,647 0.018 | 2,647 0.034 | 2,647 0.037 | 2,647 0.034 | 2,647 0.037 |

Table A.24: Intent-to-Treat Effects on Boys' Obesity Prevalence

| | | | | Boys' | Obesity | | | |
|---|--------------------|--------------------|----------------------|----------------------|--------------------|-----------------------|-----------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0115 (0.0110) | 0.0115 (0.0109) | 0.0124 (0.0110) | 0.0114 (0.0110) | 0.0140 (0.0111) | 0.0132 (0.0112) | 0.0132 (0.0113) | 0.0121 (0.0115) |
| Age | | -0.0025 (0.0178) | | | | | | |
| SES Index (percentile) | | | 0.0006** (0.0002) | 0.0005** (0.0003) | 0.0006** (0.0003) | $0.0016* \\ (0.0009)$ | $0.0005* \\ (0.0003)$ | $0.0016* \\ (0.0009)$ |
| (SES Index) 2 | | | | | | -0.00001 (0.00001) | | -0.00001 (0.00001) |
| Mother's Educ \geq 6y | | | | | | | 0.0218 (0.0163) | 0.0241 (0.0168) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0008* (0.0004) | -0.0001 (0.0007) | -0.0001 (0.0007) | -0.0000 (0.0007) | -0.0000 (0.0007) |
| Children 6-17y (%) | | | | 0.0024 (0.0041) | 0.0002 (0.0060) | 0.0003 (0.0060) | 0.0002 (0.0059) | 0.0003 (0.0060) |
| Physicians per 1000s | | | | $0.0006 \\ (0.0077)$ | -0.0000 (0.0078) | -0.0004 (0.0079) | -0.0005 (0.0077) | -0.0009 (0.0078) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 | 0.115 |
| Observations \mathbb{R}^2 | 1,872 0.013 | 1,872 0.013 | 1,872 0.017 | 1,872 0.019 | 1,872 0.037 | 1,872 0.037 | 1,872 0.038 | 1,872 0.039 |

Table A.25: Intent-to-Treat Effects on Girls' Obesity Prevalence

| | | | | Girls | ' Obesity | | | |
|---|-------------------|--------------------|-------------------|---------------------|----------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0015 (0.0142) | 0.0024 (0.0144) | 0.0015 (0.0143) | 0.0014 (0.0141) | 0.0028 (0.0141) | 0.0017 (0.0144) | 0.0031 (0.0142) | 0.0018 (0.0144) |
| Age | | -0.0204 (0.0173) | | | | | | |
| SES Index (percentile) | | | 0.0006** (0.0003) | 0.0005** (0.0003) | 0.0006** (0.0003) | 0.0022*** (0.0008) | 0.0006** (0.0003) | 0.0022*** (0.0008) |
| (SES Index) 2 | | | | | | -0.00002* (0.00001) | | -0.00002* (0.00001) |
| Mother's Educ \geq 6y | | | | | | | -0.0082 (0.0172) | -0.0041 (0.0169) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0003 (0.0004) | 0.0003 (0.0005) | 0.0004 (0.0005) | 0.0003 (0.0005) | 0.0004 (0.0005) |
| Children 6-17y (%) | | | | 0.0004 (0.0048) | -0.0027 (0.0068) | -0.0025 (0.0068) | -0.0027 (0.0068) | -0.0025 (0.0068) |
| Physicians per 1000s | | | | -0.0009 (0.0061) | -0.0007 (0.0063) | -0.0003 (0.0064) | -0.0008 (0.0063) | -0.0004 (0.0064) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 |
| Observations \mathbb{R}^2 | 2,026 0.017 | 2,026 0.018 | 2,026 0.022 | 2,026 0.022 | 2,026 0.039 | 2,026 0.042 | 2,026 0.040 | 2,026 0.043 |

Table A.26: Intent-to-Treat Effects on Boys' Height

| | | | | Boys' He | eight (cm) | | | |
|---|--------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.639** (0.303) | 0.596* (0.304) | 0.735** (0.296) | 0.715** (0.289) | 0.878*** (0.256) | 0.875*** (0.254) | 0.881*** (0.258) | 0.875*** (0.256) |
| Age | | 1.466*** (0.429) | | | | | | |
| SES Index (percentile) | | | 0.053*** (0.006) | 0.046*** (0.006) | 0.046*** (0.005) | 0.052*** (0.020) | 0.042*** (0.006) | 0.055*** (0.019) |
| (SES Index) 2 | | | | | | -0.0001 (0.0002) | | -0.0001 (0.0002) |
| Mother's Educ \geq 6y | | | | | | | 0.826* (0.466) | 0.857^* (0.471) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.049*** (0.012) | 0.001 (0.014) | 0.001 (0.014) | 0.003 (0.013) | 0.003 (0.013) |
| Children 6-17y (%) | | | | 0.127 (0.118) | -0.265** (0.118) | -0.266** (0.118) | -0.270** (0.116) | -0.272** (0.116) |
| Physicians per 1000s | | | | 0.114 (0.221) | $0.062 \\ (0.195)$ | 0.063 (0.195) | 0.041 (0.191) | 0.044 (0.192) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 154.0 | 154.0 | 154.0 | 154.0 | 154.0 | 154.0 | 154.0 | 154.0 |
| Observations \mathbb{R}^2 | 5,254 0.647 | 5,254 0.649 | 5,254 0.660 | 5,254 0.665 | 5,254 0.678 | 5,254 0.678 | 5,254 0.679 | 5,254 0.679 |

Table A.27: Intent-to-Treat Effects on Boys' Standardized Height for Age

| - | | | | | | | | |
|---|------------------|-------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | | | I | Boys' Heigh | t-for-Age (z | -score) | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.067 (0.043) | 0.069 (0.043) | 0.081* (0.042) | 0.078* (0.040) | 0.099*** (0.035) | 0.100*** (0.034) | 0.099*** (0.034) | 0.098*** (0.034) |
| Age | | -0.041 (0.055) | | | | | | |
| SES Index (percentile) | | | 0.007*** (0.001) | 0.006*** (0.001) | 0.007*** (0.001) | 0.006** (0.003) | 0.006*** (0.001) | 0.007** (0.003) |
| (SES Index) 2 | | | | | | $0.0000 \\ (0.0000)$ | | -0.0000 (0.0000) |
| Mother's Educ \geq 6y | | | | | | | 0.137** (0.056) | 0.139** (0.056) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.005*** (0.002) | 0.002 (0.002) | 0.002 (0.002) | 0.002 (0.002) | $0.002 \\ (0.002)$ |
| Children 6-17y (%) | | | | 0.011 (0.016) | -0.047*** (0.016) | -0.047*** (0.016) | -0.047*** (0.016) | -0.047*** (0.016) |
| Physicians per 1000s | | | | 0.041 (0.031) | 0.029 (0.023) | 0.029 (0.023) | 0.026 (0.023) | 0.026 (0.023) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 | -0.49 |
| Observations \mathbb{R}^2 | $4,644 \\ 0.075$ | $4,644 \\ 0.076$ | $4,644 \\ 0.112$ | $4,644 \\ 0.122$ | $4,644 \\ 0.157$ | $4,644 \\ 0.157$ | $4,644 \\ 0.161$ | 4,644 0.161 |

Table A.28: Intent-to-Treat Effects on Girls' Height

| | | | | Girls' H | eight (cm) | | | |
|---|------------------|-----------------|--------------------|----------------------|---------------------|----------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.068 (0.269) | 0.059 (0.267) | 0.081 (0.262) | 0.129 (0.250) | 0.215 (0.243) | 0.216 (0.242) | 0.247 (0.243) | 0.237 (0.241) |
| Age | | 0.469 (0.435) | | | | | | |
| SES Index (percentile) | | | 0.036*** (0.005) | 0.025*** (0.005) | 0.024*** (0.005) | 0.023 (0.016) | 0.019*** (0.005) | 0.029* (0.015) |
| (SES Index) 2 | | | | | | $0.0000 \\ (0.0002)$ | | -0.0001 (0.0002) |
| Mother's Educ \geq 6y | | | | | | | 1.266*** (0.253) | 1.294*** (0.255) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.070*** (0.010) | -0.026** (0.012) | -0.026** (0.012) | -0.023** (0.012) | -0.023* (0.012) |
| Children 6-17y (%) | | | | 0.158 (0.099) | -0.151 (0.109) | -0.151 (0.109) | -0.152 (0.108) | -0.151 (0.107) |
| Physicians per 1000s | | | | -0.256 (0.202) | -0.237 (0.221) | -0.237 (0.221) | -0.242 (0.217) | -0.242 (0.217) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 150.9 | 150.9 | 150.9 | 150.9 | 150.9 | 150.9 | 150.9 | 150.9 |
| Observations \mathbb{R}^2 | 5,913 0.328 | 5,913 0.328 | 5,913 0.342 | 5,913 0.362 | 5,913 0.388 | 5,913 0.388 | 5,913 0.393 | 5,913 0.393 |

Table A.29: Intent-to-Treat Effects on Girls' Standardized Height for Age

| | | | Gi | irls' Height- | for-Age $(z$ -s | score) | | |
|---|------------------|------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.020 (0.047) | 0.023 (0.047) | 0.023 (0.046) | 0.023 (0.044) | 0.033 (0.042) | 0.033 (0.042) | 0.036 (0.042) | 0.034 (0.041) |
| Age | | -0.093 (0.070) | | | | | | |
| SES Index (percentile) | | | 0.005*** (0.001) | 0.004*** (0.001) | 0.004*** (0.001) | 0.004 (0.003) | 0.003*** (0.001) | 0.005* (0.003) |
| (SES Index) 2 | | | | | | -0.0000 (0.0000) | | -0.0000 (0.0000) |
| Mother's Educ \geq 6y | | | | | | | 0.183*** (0.046) | 0.188*** (0.046) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.010*** (0.001) | -0.003* (0.002) | -0.003* (0.002) | -0.003 (0.002) | -0.002 (0.002) |
| Children 6-17y (%) | | | | 0.023* (0.014) | -0.024 (0.016) | -0.024 (0.016) | -0.023 (0.016) | -0.023 (0.016) |
| Physicians per 1000s | | | | -0.039 (0.030) | -0.042 (0.034) | -0.042 (0.034) | -0.045 (0.033) | -0.044 (0.033) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | -0.61 | -0.61 | -0.61 | -0.61 | -0.61 | -0.61 | -0.61 | -0.61 |
| Observations R^2 | 5,190 0.084 | $5,190 \\ 0.085$ | $5,190 \\ 0.102$ | $5,190 \\ 0.125$ | $5,190 \\ 0.156$ | $5,190 \\ 0.156$ | $5,190 \\ 0.162$ | 5,190 0.162 |

Table A.30: Intent-to-Treat Effects on Boys' Weight

| | | | | Boys' W | Teight (kg) | | | |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.970** (0.457) | 0.915** (0.442) | 1.055** (0.438) | 1.063** (0.439) | 1.253*** (0.447) | 1.246*** (0.447) | 1.258*** (0.442) | 1.245*** (0.441) |
| Age | | 2.103*** (0.619) | | | | | | |
| SES Index (percentile) | | | 0.047*** (0.008) | 0.041*** (0.008) | 0.044*** (0.008) | 0.057* (0.033) | 0.039*** (0.008) | 0.061* (0.032) |
| (SES Index) 2 | | | | | | -0.0002 (0.0004) | | -0.0002 (0.0004) |
| Mother's Educ \geq 6y | | | | | | | 1.054** (0.515) | 1.109** (0.500) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.028* (0.015) | 0.021 (0.019) | 0.021 (0.019) | 0.024 (0.019) | 0.024 (0.019) |
| Children 6-17y (%) | | | | -0.195 (0.144) | -0.386* (0.204) | -0.388* (0.205) | -0.391* (0.204) | -0.395* (0.204) |
| Physicians per 1000s | | | | 0.122 (0.334) | 0.064 (0.309) | $0.067 \\ (0.308)$ | 0.042 (0.304) | 0.046 (0.303) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes |
| Mean DV Observations R ² | 50.3 5,298 0.444 | 50.3 5,298 0.446 | 50.3 5,298 0.449 | 50.3 5,298 0.451 | 50.3 5,298 0.462 | 50.3 5,298 0.462 | 50.3 5,298 0.462 | 50.3 5,298 0.462 |

Table A.31: Intent-to-Treat Effects on Boys' Standardized Weight for Age

| | | | Во | oys' Weight | -for-Age (z - | -score) | | |
|---|-----------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.079 (0.053) | 0.078 (0.052) | 0.089* (0.050) | 0.090* (0.049) | 0.109** (0.049) | 0.106** (0.048) | 0.108** (0.048) | 0.105** (0.047) |
| Age | | $0.026 \\ (0.062)$ | | | | | | |
| SES Index (percentile) | | | 0.005*** (0.001) | 0.005*** (0.001) | 0.005*** (0.001) | 0.010*** (0.004) | 0.004*** (0.001) | 0.010*** (0.003) |
| (SES Index) 2 | | | | | | -0.0001 (0.0000) | | -0.0001* (0.0000) |
| Mother's Educ \geq 6y | | | | | | | 0.146*** (0.045) | 0.160*** (0.044) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.002 (0.002) | $0.002 \\ (0.002)$ | $0.002 \\ (0.002)$ | 0.003 (0.002) | 0.003 (0.002) |
| Children 6-17y (%) | | | | -0.023 (0.014) | -0.039** (0.019) | -0.039** (0.019) | -0.040** (0.019) | -0.040** (0.019) |
| Physicians per 1000s | | | | 0.036 (0.030) | 0.032 (0.025) | 0.034 (0.025) | 0.029 (0.025) | 0.030 (0.025) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Observations \mathbb{R}^2 | 4,637 0.020 | 4,637 0.020 | 4,637 0.034 | 4,637 0.040 | 4,637 0.058 | 4,637 0.059 | 4,637 0.061 | 4,637 0.063 |

Table A.32: Intent-to-Treat Effects on Girls' Weight

| | | | | Girls' W | Veight (kg) | | | |
|---|------------------|------------------|---------------------|----------------------|--------------------|-----------------------|---------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.212 (0.484) | 0.190 (0.481) | 0.224 (0.483) | 0.261 (0.476) | 0.345 (0.471) | 0.279 (0.477) | 0.360 (0.469) | 0.291 (0.474) |
| Age | | 0.829 (0.637) | | | | | | |
| SES Index (percentile) | | | 0.028*** (0.009) | 0.021** (0.009) | 0.020** (0.009) | 0.083*** (0.028) | $0.017* \\ (0.009)$ | 0.086*** (0.028) |
| (SES Index) 2 | | | | | | -0.0007** (0.0003) | | -0.0008** (0.0003) |
| Mother's Educ \geq 6y | | | | | | | 0.653 (0.576) | 0.839 (0.572) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.042*** (0.015) | -0.009 (0.015) | -0.006 (0.015) | -0.007 (0.015) | -0.004 (0.015) |
| Children 6-17y (%) | | | | 0.004 (0.161) | -0.264* (0.158) | -0.263* (0.157) | -0.264* (0.157) | -0.263* (0.156) |
| Physicians per 1000s | | | | -0.142 (0.213) | -0.169 (0.233) | -0.170 (0.232) | -0.171 (0.234) | -0.173 (0.233) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 49.5 | 49.5 | 49.5 | 49.5 | 49.5 | 49.5 | 49.5 | 49.5 |
| Observations R^2 | 5,823 0.248 | 5,823 0.248 | 5,823 0.251 | 5,823 0.254 | 5,823 0.267 | 5,823 0.268 | 5,823 0.268 | 5,823 0.269 |

Table A.33: Intent-to-Treat Effects on Girls' Standardized Weight for Age

| - | | | (| Girls' Weigl | nt-for-Age | (z-score) | | |
|---|-----------------|------------------|---------------------|----------------------|---------------------|------------------------|---------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.036 (0.042) | 0.038 (0.043) | 0.038 (0.042) | 0.039 (0.041) | 0.042 (0.039) | 0.034 (0.038) | 0.042 (0.039) | 0.034 (0.038) |
| Age | | -0.063 (0.043) | | | | | | |
| SES Index (percentile) | | | 0.003*** (0.001) | 0.002*** (0.001) | 0.002*** (0.001) | 0.009*** (0.002) | 0.002*** (0.001) | 0.009*** (0.003) |
| (SES Index) 2 | | | | | | -0.0001*** (0.0000) | | -0.0001*** (0.0000) |
| Mother's Educ \geq 6y | | | | | | | -0.020 (0.055) | -0.003 (0.056) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.004*** (0.001) | -0.001 (0.002) | -0.001 (0.002) | -0.001 (0.002) | -0.001 (0.002) |
| Children 6-17y (%) | | | | -0.012 (0.014) | -0.034** (0.017) | -0.034** (0.017) | -0.034** (0.017) | -0.034** (0.017) |
| Physicians per 1000s | | | | $0.008 \\ (0.028)$ | 0.015 (0.029) | 0.017 (0.029) | 0.015 (0.029) | 0.017 (0.029) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Observations R^2 | 5,084 0.019 | 5,084 0.020 | 5,084 0.025 | 5,084 0.033 | 5,084 0.051 | 5,084 0.053 | 5,084 0.051 | 5,084 0.053 |

Table A.34: Intent-to-Treat Effects on Boys' BMI

| | | | | Boys | , BMI | | | |
|---|------------------|--------------------|------------------|---------------------|--------------------|---------------------|-------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.169 (0.174) | 0.155 (0.170) | 0.178 (0.171) | 0.190 (0.170) | 0.227 (0.176) | 0.222 (0.175) | 0.228 (0.175) | 0.222 (0.174) |
| Age | | 0.472** (0.198) | | | | | | |
| SES Index (percentile) | | | 0.005* (0.003) | $0.005 \\ (0.003)$ | 0.005* (0.003) | 0.015 (0.011) | 0.004 (0.003) | 0.015 (0.011) |
| (SES Index) 2 | | | | | | -0.0001 (0.0001) | | -0.0001 (0.0001) |
| Mother's Educ \geq 6y | | | | | | | 0.156 (0.171) | 0.183 (0.165) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | $0.003 \\ (0.005)$ | 0.010 (0.007) | 0.010 (0.007) | 0.010 (0.007) | 0.010 (0.007) |
| Children 6-17y (%) | | | | -0.117** (0.057) | -0.103 (0.084) | -0.105 (0.084) | -0.104 (0.084) | -0.106 (0.084) |
| Physicians per 1000s | | | | 0.068 (0.105) | $0.065 \\ (0.106)$ | 0.068 (0.105) | 0.062 (0.106) | 0.063 (0.104) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 |
| Observations R^2 | $5,242 \\ 0.197$ | 5,242 0.199 | 5,242 0.198 | 5,242 0.200 | 5,242 0.209 | 5,242 0.210 | $5,242 \\ 0.210$ | 5,242 0.210 |

Table A.35: Intent-to-Treat Effects on Boys' Standardized BMI for Age $\,$

| - | | | В | oys' BMI-fo | r-Age (z-se | core) | | |
|---|------------------|--------------------|--------------------|---------------------|------------------|---------------------|--------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.041 (0.055) | 0.040 (0.054) | 0.044 (0.054) | 0.048 (0.052) | 0.057 (0.055) | 0.055 (0.054) | 0.057 (0.054) | 0.054 (0.053) |
| Age | | $0.045 \\ (0.060)$ | | | | | | |
| SES Index (percentile) | | | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | 0.002* (0.001) | 0.006* (0.003) | $0.001 \\ (0.001)$ | 0.007* (0.003) |
| (SES Index) 2 | | | | | | -0.0001 (0.0000) | | -0.0001 (0.0000) |
| Mother's Educ \geq 6y | | | | | | | $0.060 \\ (0.046)$ | 0.072 (0.044) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.002 (0.001) | 0.002 (0.002) | 0.002 (0.002) | 0.002 (0.002) | $0.002 \\ (0.002)$ |
| Children 6-17y (%) | | | | -0.035** (0.016) | -0.015 (0.020) | -0.015 (0.020) | -0.016 (0.020) | -0.016 (0.020) |
| Physicians per 1000s | | | | 0.012 (0.028) | 0.014 (0.025) | $0.015 \\ (0.025)$ | 0.013 (0.025) | 0.014 (0.025) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Observations R^2 | 4,632 0.011 | 4,632 0.012 | 4,632 0.012 | 4,632 0.015 | 4,632 0.028 | 4,632 0.029 | 4,632 0.029 | 4,632 0.030 |

Table A.36: Intent-to-Treat Effects on Girls' BMI

| | | | | Gi | rls' BMI | | | |
|---|------------------|--------------------|------------------|------------------|------------------|-----------------------|------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.120 (0.179) | 0.117 (0.179) | 0.121 (0.179) | 0.122 (0.178) | 0.134 (0.178) | 0.108 (0.180) | 0.130 (0.179) | 0.106 (0.181) |
| Age | | $0.162 \\ (0.223)$ | | | | | | |
| SES Index (percentile) | | | 0.001 (0.003) | 0.001 (0.003) | 0.001 (0.003) | 0.027** (0.010) | 0.001 (0.003) | 0.026** (0.010) |
| (SES Index) 2 | | | | | | -0.0003** (0.0001) | | -0.0003** (0.0001) |
| Mother's Educ \geq 6y | | | | | | | -0.163 (0.207) | -0.094 (0.207) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.001 (0.006) | 0.003 (0.007) | 0.004 (0.007) | 0.003 (0.007) | 0.004 (0.007) |
| Children 6-17y (%) | | | | -0.036 (0.057) | -0.056 (0.067) | -0.056 (0.067) | -0.056 (0.068) | -0.056 (0.067) |
| Physicians per 1000s | | | | 0.039 (0.100) | 0.025 (0.124) | 0.024 (0.123) | 0.025 (0.123) | 0.024 (0.123) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |
| Observations R^2 | $5,760 \\ 0.149$ | $5,760 \\ 0.150$ | $5,760 \\ 0.149$ | $5,760 \\ 0.150$ | $5,760 \\ 0.158$ | $5,760 \\ 0.160$ | $5,760 \\ 0.159$ | $5,760 \\ 0.160$ |

Table A.37: Intent-to-Treat Effects on Girls' Standardized BMI for Age $\,$

| | | | | Girls' BM | I-for-Age | (z-score) | | |
|---|------------------|------------------|--------------------|--------------------|--------------------|------------------------|---------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.036 (0.044) | 0.037 (0.044) | 0.037 (0.044) | 0.037 (0.043) | 0.035 (0.040) | 0.027 (0.040) | 0.033 (0.040) | 0.026 (0.040) |
| Age | | -0.026 (0.044) | | | | | | |
| SES Index (percentile) | | | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | $0.001 \\ (0.001)$ | 0.008*** (0.002) | $0.001 \\ (0.001)$ | 0.007*** (0.002) |
| (SES Index) 2 | | | | | | -0.0001*** (0.0000) | | -0.0001*** (0.0000) |
| Mother's Educ \geq 6y | | | | | | | -0.107** (0.050) | -0.092* (0.051) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | $0.001 \\ (0.001)$ | -0.000 (0.002) | $0.000 \\ (0.002)$ | -0.000 (0.002) | -0.000 (0.002) |
| Children 6-17y (%) | | | | -0.024* (0.013) | -0.016 (0.015) | -0.016 (0.015) | -0.017 (0.015) | -0.017 (0.015) |
| Physicians per 1000s | | | | 0.023 (0.028) | 0.033 (0.029) | $0.035 \\ (0.028)$ | 0.034 (0.029) | 0.036 (0.028) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Observations R^2 | $5,081 \\ 0.013$ | $5,081 \\ 0.013$ | $5,081 \\ 0.013$ | $5,081 \\ 0.016$ | $5,081 \\ 0.032$ | $5,081 \\ 0.036$ | $5,081 \\ 0.035$ | 5,081 0.037 |

Table A.38: Intent-to-Treat Effects on Boys' Underweight Prevalence

| | | | | Boys' | Underweigh | t | | |
|---|---------------------|---------------------|---------------------|----------------------|-----------------------|------------------------|-----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | -0.0009 (0.0129) | -0.0002 (0.0128) | -0.0005 (0.0129) | -0.0008 (0.0128) | -0.0011 (0.0129) | -0.0006 (0.0127) | -0.0011 (0.0129) | -0.0006 (0.0126) |
| Age | | -0.0226 (0.0174) | | | | | | |
| SES Index (percentile) | | | 0.0002 (0.0003) | $0.0001 \\ (0.0003)$ | $0.0001 \\ (0.0003)$ | -0.0009 (0.0010) | $0.0001 \\ (0.0003)$ | -0.0009 (0.0010) |
| (SES Index) 2 | | | | | | $0.00001 \\ (0.00001)$ | | $0.00001 \\ (0.00001)$ |
| Mother's Educ \geq 6y | | | | | | | 0.0091 (0.0142) | $0.0068 \ (0.0136)$ |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0005 (0.0003) | -0.0001 (0.0005) | -0.0001 (0.0005) | -0.0001 (0.0005) | -0.0001 (0.0005) |
| Children 6-17y (%) | | | | -0.0012 (0.0036) | -0.0087** (0.0038) | -0.0087** (0.0038) | -0.0088** (0.0038) | -0.0087** (0.0037) |
| Physicians per 1000s | | | | -0.0045 (0.0093) | -0.0000 (0.0095) | -0.0002 (0.0094) | -0.0002 (0.0095) | -0.0003 (0.0094) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 |
| Observations R^2 | 3,517 0.013 | 3,517 0.014 | 3,517 0.013 | 3,517 0.015 | 3,517 0.032 | 3,517 0.032 | 3,517 0.032 | 3,517 0.033 |

Table A.39: Intent-to-Treat Effects on Girls' Underweight Prevalence

| | | | | Girls' U | nderweight | ; | | |
|---|-------------------|-------------------|-------------------|----------------------|---------------------|------------------------|--------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0062 (0.0125) | 0.0062 (0.0125) | 0.0062 (0.0125) | 0.0067 (0.0125) | 0.0099 (0.0119) | 0.0105 (0.0118) | 0.0100 (0.0118) | 0.0105 (0.0118) |
| Age | | 0.0014 (0.0129) | | | | | | |
| SES Index (percentile) | | | 0.0001 (0.0003) | 0.0001 (0.0003) | 0.0001 (0.0002) | -0.0006 (0.0007) | -0.0000 (0.0003) | -0.0005 (0.0007) |
| (SES Index) 2 | | | | | | $0.00001 \\ (0.00001)$ | | $0.00001 \\ (0.00001)$ |
| Mother's Educ \geq 6y | | | | | | | 0.0215 (0.0151) | $0.0202 \\ (0.0151)$ |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0002 (0.0004) | 0.0009 (0.0007) | 0.0009 (0.0007) | 0.0009 (0.0007) | 0.0009 (0.0007) |
| Children 6-17y (%) | | | | 0.0079** (0.0039) | -0.0019 (0.0049) | -0.0018 (0.0049) | -0.0017 (0.0049) | -0.0017 (0.0049) |
| Physicians per 1000s | | | | 0.0051 (0.0066) | 0.0054 (0.0065) | 0.0053 (0.0065) | 0.0053 (0.0065) | 0.0053 (0.0065) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.055 | 0.055 | 0.055 | 0.055 | 0.055 | 0.055 | 0.055 | 0.055 |
| Observations R^2 | 3,886 0.019 | 3,886 0.019 | 3,886 0.019 | 3,886 0.022 | 3,886 0.039 | 3,886 0.039 | 3,886 0.040 | 3,886 0.041 |

Table A.40: Intent-to-Treat Effects on Boys' Overweight Prevalence

| | | | | Boys' C | verweight | | | |
|---|--------------------|--------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0210 (0.0183) | 0.0207 (0.0181) | 0.0220 (0.0181) | 0.0223 (0.0176) | 0.0240 (0.0184) | 0.0240 (0.0184) | 0.0241 (0.0183) | 0.0240 (0.0183) |
| Age | | 0.0127 (0.0234) | | | | | | |
| SES Index (percentile) | | | $0.0006* \\ (0.0003)$ | $0.0005 \\ (0.0004)$ | $0.0006* \\ (0.0004)$ | $0.0006 \\ (0.0013)$ | $0.0006 \\ (0.0004)$ | $0.0006 \\ (0.0013)$ |
| (SES Index) 2 | | | | | | -0.00000 (0.00001) | | -0.00000 (0.00001) |
| Mother's Educ \geq 6y | | | | | | | 0.0069 (0.0203) | $0.0070 \\ (0.0197)$ |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | 0.0002 (0.0006) | 0.0007 (0.0008) | 0.0007 (0.0008) | 0.0007 (0.0008) | 0.0007 (0.0008) |
| Children 6-17y (%) | | | | -0.0131* (0.0070) | -0.0133 (0.0099) | -0.0133 (0.0098) | -0.0133 (0.0099) | -0.0133 (0.0098) |
| Physicians per 1000s | | | | -0.0046 (0.0111) | -0.0023 (0.0120) | -0.0023 (0.0120) | -0.0025 (0.0120) | -0.0025 (0.0120) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.330 | 0.330 | 0.330 | 0.330 | 0.330 | 0.330 | 0.330 | 0.330 |
| Observations R^2 | 4,977 0.035 | 4,977 0.035 | 4,977 0.036 | 4,977 0.039 | 4,977 0.047 | 4,977 0.047 | 4,977 0.047 | 4,977 0.047 |

Table A.41: Intent-to-Treat Effects on Girls' Overweight Prevalence

| | | | | Girls' | Overweight | t | | |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------|----------------------|-------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0378** (0.0185) | 0.0380** (0.0186) | 0.0379** (0.0185) | 0.0378** (0.0188) | 0.0392** (0.0188) | 0.0367* (0.0190) | 0.0393** (0.0189) | 0.0369* (0.0190) |
| Age | | -0.0090 (0.0222) | | | | | | |
| SES Index (percentile) | | | 0.0001 (0.0003) | 0.0001 (0.0003) | $0.0001 \\ (0.0003)$ | 0.0026** (0.0011) | 0.0001 (0.0003) | 0.0027** (0.0011) |
| (SES Index) 2 | | | | | | -0.00003** (0.00001) | | -0.00003** (0.00001) |
| Mother's Educ \geq 6y | | | | | | | 0.0026 (0.0203) | 0.0094 (0.0206) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0004 (0.0006) | 0.0006 (0.0007) | 0.0007 (0.0007) | $0.0006 \\ (0.0007)$ | 0.0007 (0.0007) |
| Children 6-17y (%) | | | | 0.0066 (0.0059) | 0.0011 (0.0063) | 0.0011 (0.0063) | 0.0011 (0.0063) | 0.0011 (0.0063) |
| Physicians per 1000s | | | | -0.0074 (0.0094) | -0.0071 (0.0113) | -0.0070 (0.0113) | -0.0071 (0.0113) | -0.0071 (0.0113) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.341 | 0.341 | 0.341 | 0.341 | 0.341 | 0.341 | 0.341 | 0.341 |
| Observations \mathbb{R}^2 | 5,520 0.024 | 5,520 0.024 | 5,520 0.024 | 5,520 0.025 | $5,520 \\ 0.039$ | 5,520 0.041 | 5,520 0.039 | 5,520 0.041 |

Table A.42: Intent-to-Treat Effects on Boys' Obesity Prevalence

| | | | | Boys' | Obesity | | | |
|---|--------------------|--------------------|--------------------|-----------------------|---------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0120 (0.0102) | 0.0120 (0.0102) | 0.0123 (0.0101) | 0.0126 (0.0101) | 0.0156 (0.0106) | 0.0157 (0.0107) | 0.0157 (0.0104) | 0.0157 (0.0105) |
| Age | | -0.0019 (0.0127) | | | | | | |
| SES Index (percentile) | | | 0.0003 (0.0002) | 0.0002 (0.0002) | 0.0002 (0.0002) | -0.0000 (0.0008) | 0.0001 (0.0002) | $0.0000 \\ (0.0008)$ |
| (SES Index) 2 | | | | | | $0.00000 \\ (0.00001)$ | | $0.00000 \\ (0.00001)$ |
| Mother's Educ \geq 6y | | | | | | | 0.0210 (0.0137) | $0.0208 \ (0.0139)$ |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | -0.0003 (0.0004) | 0.0004 (0.0005) | $0.0004 \\ (0.0005)$ | $0.0005 \\ (0.0005)$ | $0.0005 \\ (0.0005)$ |
| Children 6-17y (%) | | | | -0.0081** (0.0038) | -0.0092 (0.0058) | -0.0092 (0.0058) | -0.0094 (0.0058) | -0.0094 (0.0058) |
| Physicians per 1000s | | | | $0.0085 \ (0.0083)$ | 0.0094 (0.0090) | 0.0094 (0.0090) | 0.0089 (0.0090) | 0.0089 (0.0090) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 |
| Observations R^2 | $3,679 \\ 0.041$ | $3,679 \\ 0.041$ | $3,679 \\ 0.042$ | 3,679 0.048 | $3,679 \\ 0.058$ | 3,679 0.058 | $3,679 \\ 0.059$ | 3,679 0.059 |

Table A.43: Intent-to-Treat Effects on Girls' Obesity Prevalence

| | | | | Girls | ' Obesity | | | |
|---|--------------------|--------------------|--------------------|----------------------|----------------------|-----------------------|----------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Years Treated | 0.0203 (0.0139) | 0.0204 (0.0136) | 0.0201 (0.0138) | 0.0202 (0.0141) | 0.0226 (0.0143) | 0.0219 (0.0144) | 0.0226 (0.0143) | 0.0219 (0.0144) |
| Age | | -0.0056 (0.0221) | | | | | | |
| SES Index (percentile) | | | 0.0003 (0.0002) | 0.0004 (0.0002) | 0.0003 (0.0002) | $0.0012* \\ (0.0007)$ | 0.0003 (0.0002) | 0.0012* (0.0007) |
| (SES Index) 2 | | | | | | -0.00001 (0.00001) | | -0.00001 (0.00001) |
| Mother's Educ \geq 6y | | | | | | | -0.0057 (0.0167) | -0.0036 (0.0169) |
| Locality Controls | | | | | | | | |
| Marginality (percentile) | | | | $0.0001 \\ (0.0004)$ | 0.0009** (0.0005) | 0.0010** (0.0005) | 0.0009** (0.0004) | 0.0010** (0.0005) |
| Children 6-17y (%) | | | | -0.0004 (0.0041) | -0.0070 (0.0055) | -0.0070 (0.0056) | -0.0070 (0.0055) | -0.0070 (0.0056) |
| Physicians per 1000s | | | | -0.0103 (0.0092) | -0.0140 (0.0089) | -0.0140 (0.0088) | -0.0140 (0.0089) | -0.0140 (0.0088) |
| State FE | no | no | no | no | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.070 | 0.070 | 0.070 | 0.070 | 0.070 | 0.070 | 0.070 | 0.070 |
| Observations \mathbb{R}^2 | $3,964 \\ 0.079$ | $3,964 \\ 0.079$ | $3,964 \\ 0.080$ | $3,964 \\ 0.080$ | 3,964 0.091 | 3,964 0.092 | 3,964 0.092 | 3,964 0.092 |

Table A.44: Intent-to-Treat Effects by Socioeconomic Status on Anthropometric Measures

| | Heig | ht (cm) | Weigh | nt (kg) | В | MI |
|---|---------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| | 0.694*** (0.244) | 0.349* (0.198) | 1.107*** (0.378) | 1.269*** (0.373) | 0.281** (0.117) | 0.534*** (0.142) |
| High SES \times Years Treated | 0.208 (0.191) | 0.207 (0.177) | 0.146 (0.323) | $0.673* \\ (0.358)$ | -0.037 (0.112) | 0.322** (0.135) |
| SES Index (percentile) | 0.119*** (0.035) | 0.107*** (0.026) | 0.184*** (0.042) | 0.221*** (0.043) | 0.053*** (0.017) | 0.060*** (0.017) |
| (SES Index) 2 | -0.0005 (0.0004) | -0.0007*** (0.0003) | -0.0012*** (0.0004) | -0.0018*** (0.0005) | -0.0004** (0.0002) | -0.0005*** (0.0002) |
| Locality Controls | | | | | | |
| Marginality (percentile) | 0.042** (0.016) | -0.029* (0.015) | 0.038 (0.026) | 0.016 (0.026) | $0.008 \\ (0.009)$ | 0.016 (0.010) |
| Children 6-17y (%) | -0.394** (0.155) | -0.138 (0.152) | -0.205 (0.224) | -0.343 (0.293) | -0.023 (0.079) | -0.152 (0.109) |
| Physicians per 1000s | 0.489 (0.388) | -0.122 (0.289) | 0.261 (0.336) | $0.678* \\ (0.393)$ | $0.006 \\ (0.114)$ | 0.339*** (0.124) |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV | 144.1 | 145.2 | 41.7 | 42.8 | 19.8 | 20.0 |
| Observations \mathbb{R}^2 | $2,511 \\ 0.771$ | $2,720 \\ 0.502$ | $2,530 \\ 0.561$ | $2,688 \\ 0.366$ | $2,506 \\ 0.227$ | 2,670 0.211 |

Table A.45: Intent-to-Treat Effects by Socioeconomic Status on BMI Categories

| | Under | weight | Over | weight | Ob | esity |
|---|------------------------|------------------------|-------------------------|--------------------------|------------------------|-------------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| | 0.0116 (0.0112) | -0.0110 (0.0078) | 0.0273* (0.0162) | 0.0448*** (0.0158) | 0.0198** (0.0095) | 0.0227*** (0.0072) |
| High SES \times Years Treated | 0.0096 (0.0103) | $0.0006 \\ (0.0097)$ | -0.0165 (0.0138) | 0.0188 (0.0154) | $0.0050 \\ (0.0074)$ | 0.0131* (0.0072) |
| SES Index (percentile) | -0.0036* (0.0021) | -0.0010 (0.0009) | 0.0055*** (0.0018) | 0.0060*** (0.0020) | 0.0027** (0.0011) | 0.0029*** (0.0009) |
| (SES Index) 2 | $0.00004 \\ (0.00002)$ | $0.00001 \\ (0.00001)$ | -0.00004** (0.00002) | -0.00005*** (0.00002) | -0.00002* (0.00001) | -0.00002** (0.00001) |
| Locality Controls | | | | | | |
| Marginality (percentile) | -0.0003 (0.0008) | 0.0001 (0.0006) | 0.0016 (0.0012) | 0.0015 (0.0010) | -0.0003 (0.0007) | $0.0005 \\ (0.0005)$ |
| Children 6-17y (%) | -0.0070 (0.0057) | $0.0004 \\ (0.0063)$ | -0.0117 (0.0092) | -0.0077 (0.0079) | 0.0017 (0.0063) | -0.0021 (0.0070) |
| Physicians per 1000s | -0.0066 (0.0119) | -0.0013 (0.0054) | 0.0072 (0.0136) | 0.0222** (0.0102) | -0.0006 (0.0072) | -0.0004 (0.0065) |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.068 | 0.069 | 0.318 | 0.289 | 0.115 | 0.077 |
| Observations R^2 | $1,667 \\ 0.058$ | $1,845 \\ 0.032$ | $2,168 \\ 0.045$ | $2,424 \\ 0.046$ | $1,739 \\ 0.043$ | 1,851 0.053 |

Table A.46: First Stage OLS Estimates on Take-up Rate (Binary)

| | | | Γ | Take-up in 2 | 006 | | |
|---|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Treated=1 | 0.147*** (0.026) | 0.135*** (0.024) | 0.135*** (0.022) | 0.134*** (0.022) | 0.134*** (0.022) | 0.134*** (0.021) | 0.136*** (0.021) |
| SES Index (percentile) | | | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) |
| Mun. Marginality Index (percentile) | | | | 0.003*** (0.001) | 0.003*** (0.001) | 0.002** (0.001) | 0.002* (0.001) |
| Locality Controls | | | | | | | |
| Physicians per 1000s | | | | | -0.023*** (0.006) | -0.031*** (0.007) | -0.028*** (0.007) |
| Illiteracy Rate (%) | | | | | | 0.016*** (0.005) | 0.014** (0.006) |
| Mean Schooling (years) | | | | | | 0.035*** (0.012) | 0.053*** (0.013) |
| Members per Household | | | | | | | 0.085 (0.054) |
| Female (%) | | | | | | | -0.024** (0.011) |
| State FE | no | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 |
| Observations | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 |
| \mathbb{R}^2 | 0.118 | 0.155 | 0.261 | 0.278 | 0.283 | 0.291 | 0.298 |

Notes: Sample restricted to children born between 1987–1989 from urban localities not treated by 2000. Standard errors clustered by locality. All regressions include sample weights. *** p < 0.01, ** p < 0.05, * p < 0.10.

Sources: ENSANUT, Progresa Administrative Records, CONAPO, INEGI, Ministry of Health.

Table A.47: First Stage OLS Estimates on Take-up Rate (Continuous)

| | | | Γ | Take-up in 20 | 006 | | |
|---|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Years Treated | 0.035*** (0.006) | 0.032*** (0.006) | 0.032*** (0.005) | 0.032*** (0.005) | 0.032*** (0.005) | 0.032*** (0.005) | 0.033*** (0.005) |
| SES Index (percentile) | | | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) |
| Mun. Marginality Index (percentile) | | | | 0.003*** (0.001) | 0.003*** (0.001) | 0.002** (0.001) | 0.002* (0.001) |
| Locality Controls | | | | | | | |
| Physicians per 1000s | | | | | -0.023*** (0.006) | -0.031*** (0.008) | -0.028*** (0.007) |
| Illiteracy Rate (%) | | | | | | 0.016*** (0.005) | 0.014** (0.006) |
| Mean Schooling (years) | | | | | | 0.035*** (0.012) | 0.054*** (0.013) |
| Members per Household | | | | | | | $0.088* \\ (0.053)$ |
| Female (%) | | | | | | | -0.024** (0.011) |
| State FE | no | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 |
| Observations D2 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 |
| R ² | 0.119 | 0.156 | 0.263 | 0.280 | 0.284 | 0.292 | 0.300 |

Notes: Sample restricted to children born between 1987–1989 from urban localities not treated by 2000. Standard errors clustered by locality. All regressions include sample weights. *** p < 0.01, ** p < 0.05, * p < 0.10.

Sources: ENSANUT, Progresa Administrative Records, CONAPO, INEGI, Ministry of Health.

Table A.48: First Stage OLS Estimates on Take-up Rate (Categories)

| | | | Γ | Take-up in 2 | 006 | | |
|---|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Years Treated=4 | 0.127*** (0.029) | 0.115*** (0.027) | 0.113*** (0.025) | 0.114*** (0.024) | 0.113*** (0.024) | 0.112*** (0.023) | 0.111*** (0.023) |
| Years Treated=5 | 0.197*** (0.048) | 0.183*** (0.046) | 0.187*** (0.042) | 0.184*** (0.040) | 0.184*** (0.039) | 0.187*** (0.039) | 0.199*** (0.038) |
| SES Index (percentile) | | | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) | -0.003*** (0.000) |
| Mun. Marginality Index (percentile) | | | | 0.003*** (0.001) | 0.003*** (0.001) | 0.002** (0.001) | 0.002* (0.001) |
| Locality Controls | | | | | | | |
| Physicians per 1000s | | | | | -0.023*** (0.006) | -0.031*** (0.008) | -0.028*** (0.007) |
| Illiteracy Rate (%) | | | | | | 0.016*** (0.005) | 0.014** (0.006) |
| Mean Schooling (years) | | | | | | 0.036*** (0.012) | 0.055*** (0.013) |
| Members per Household | | | | | | | 0.093* (0.052) |
| Female (%) | | | | | | | -0.025** (0.011) |
| State FE | no | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes | yes |
| Mean DV | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 | 144.7 |
| Observations P ² | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 | 5,714 |
| \mathbb{R}^2 | 0.120 | 0.156 | 0.264 | 0.280 | 0.285 | 0.293 | 0.302 |

Notes: Sample restricted to children born between 1987–1989 from urban localities not treated by 2000. Standard errors clustered by locality. All regressions include sample weights. *** p < 0.01, ** p < 0.05, * p < 0.10. Sources: ENSANUT, Progresa Administrative Records, CONAPO, INEGI, Ministry of Health.

Table A.49: LATE Estimates per Year on Anthropometric Measures

| | Height (cm) | | Weight (kg) | | BMI | |
|---|-----------------------|----------------------|--------------------|---------------------|-------------------|--------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| $\widehat{Progresa} = 1$ | -1.605* (0.924) | 0.814 (0.957) | -1.969 (1.591) | 0.083 (1.667) | -0.128 (0.520) | 0.263 (0.561) |
| SES Index (percentile) | 0.646*** (0.173) | 0.022 (0.179) | $0.265 \\ (0.241)$ | 0.209 (0.260) | -0.013 (0.087) | 0.098 (0.094) |
| (SES Index) 2 | -0.0224*** (0.0072) | 0.0049 (0.0074) | -0.0057 (0.0112) | -0.0009 (0.0106) | 0.0020 (0.0038) | -0.0018 (0.0037) |
| Locality Controls | | | | | | |
| Marginality (percentile) | 0.048* (0.028) | -0.058*** (0.021) | $0.016 \\ (0.036)$ | -0.069** (0.034) | 0.004 (0.011) | -0.015 (0.012) |
| Children 6-17y (%) | -0.071 (0.267) | -0.022 (0.252) | 0.048 (0.333) | 0.276 (0.451) | -0.104 (0.106) | -0.005 (0.153) |
| Physicians per 1000s | -0.717 (0.529) | 0.159 (0.474) | -0.908 (0.901) | -0.388 (0.815) | -0.074 (0.301) | -0.013 (0.319) |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV | 141.3 | 142.5 | 38.4 | 39.2 | 18.9 | 19.1 |
| Observations \mathbb{R}^2 | 771 0.800 | $896 \\ 0.556$ | $778 \\ 0.662$ | $878 \\ 0.530$ | $770 \\ 0.374$ | 875 0.366 |

Table A.50: LATE Estimates per Year on BMI Categories

| | Underweight | | Overweight | | Obesity | |
|---|----------------------|----------------------|------------------------|----------------------|-----------------------|----------------------|
| | (1) Boys | (2) Girls | (3) Boys | (4) Girls | (5) Boys | (6) Girls |
| $\widehat{Progresa} = 1$ | 0.0015 (0.0542) | 0.0084 (0.0307) | 0.0128 (0.0683) | 0.0473 (0.0660) | -0.0256 (0.0430) | 0.0157 (0.0202) |
| SES Index | $0.0068 \\ (0.0083)$ | 0.0031 (0.0059) | -0.0194 (0.0122) | 0.0189 (0.0115) | $0.0036 \\ (0.0050)$ | $0.0010 \\ (0.0038)$ |
| (SES Index) 2 | -0.00025 (0.00034) | -0.00015 (0.00020) | 0.00100** (0.00051) | -0.00041 (0.00047) | -0.00009 (0.00020) | 0.00002 (0.00014) |
| Locality Controls | | | | | | |
| Marginality (percentile) | 0.0002 (0.0015) | -0.0008 (0.0008) | 0.0033* (0.0019) | -0.0009 (0.0016) | -0.0009 (0.0007) | -0.0005 (0.0005) |
| Children 6-17y (%) | -0.0126 (0.0108) | -0.0012 (0.0111) | -0.0428** (0.0182) | -0.0041 (0.0160) | 0.0011 (0.0079) | -0.0024 (0.0071) |
| Physicians per 1000s | -0.0361 (0.0309) | -0.0178 (0.0229) | -0.0057 (0.0372) | -0.0228 (0.0435) | -0.0274 (0.0225) | 0.0029 (0.0105) |
| State FE | yes | yes | yes | yes | yes | yes |
| $\operatorname{Cohort} \times \operatorname{Time} \operatorname{FE}$ | yes | yes | yes | yes | yes | yes |
| Mean DV | 0.082 | 0.083 | 0.245 | 0.217 | 0.054 | 0.032 |
| Observations \mathbb{R}^2 | $554 \\ 0.102$ | $635 \\ 0.088$ | $674 \\ 0.131$ | 801 0.109 | $550 \\ 0.138$ | $631 \\ 0.076$ |