

Should Aid Reward Performance?  
Evidence from a field experiment on health and education in Indonesia

Online Appendices. Not for Publication.

Benjamin A. Olken, MIT  
Junko Onishi, World Bank  
Susan Wong, World Bank

**Appendix I: Details on Points**

*Generasi* uses performance relative to a constant predicted minimum attainment level, rather than improvements over an actual baseline, to avoid the ratchet effect (Weitzman 1980), as well as to avoid the problems inherent in collecting reliable baseline data on performance on all indicators in all villages before the program began. For each of the 12 *Generasi* indicators  $i$ , the program set the predicted minimum attainment level,  $m_{vi}$ , in village  $v$  to be equal to 70 percent of the average achievement level for villages with similar levels of access to health and education providers and numbers of beneficiaries, calculated from the 2004 SUSENAS household survey and 2003 PODES census of villages.

For all health indicators except monthly weighings, access to providers was divided into three categories: 1) having a midwife practicing in the village, 2) not having a midwife in the village but having a midwife practicing within 4km from the center of the village, or 3) not having a midwife practicing within 4km of the village center. For middle school, access was divided into three categories: 1) having a middle school located in the village or within 4km of the village center, 2) having a middle school located between 5 and 9km of the village center, or 3) having a middle school located 10km or more from the village center. For monthly weighings and primary school, all villages were assumed to have the same level of access, since weighing of children is always conducted in the village at monthly *Posyandu* meetings and since virtually

all villages in Indonesia have a primary school. The minimum level was set at 70 percent of the average to ensure that virtually all villages would be above the minimum threshold, and thus eligible for incentive payments, on each indicator.

The total allocation to each subdistrict is fixed exogenously based on population and province. In 2007 the average block grant for each subdistrict was USD 112,300 per subdistrict; in 2008, the average block grant was raised to USD 200,000 per subdistrict. A subdistrict contains roughly between 15,000 and 50,000 individuals and 10 to 20 villages.

## Appendix II: Details on Sample Selection and Randomization

The *Generasi* locations were selected through the following procedure. First, 300 target subdistricts were identified, targeting poor, rural areas that had an existing community-driven development infrastructure. Locations were spread among five provinces from three different parts of the country: East Java and West Java (these are Indonesia's two most populous provinces, together containing about 35 percent of Indonesia's population), NTT (a relatively poor, remote set of islands in Southeastern Indonesia, typical of Indonesia's small island areas), and Gorontalo and North Sulawesi (located on Sulawesi, one of the three major islands other than Java).

Within these five provinces, the government eliminated the wealthiest 20 percent of districts (*kabupaten*), determined by the district's poverty rate, malnutrition rate, and junior secondary school transition rate, as well as the 28 percent of districts where the PNPM rural infrastructure project was not scheduled to operate in 2007. Since *Generasi* is implemented through the national PNPM program financial infrastructure, it could only be implemented in districts that were already included in the PNPM program. Twenty districts were randomly selected from the remaining eligible districts, stratified by island group. Within the twenty selected districts, subdistricts were eligible for *Generasi* if they had previously received the PNPM program or were considered less than 67 percent urban by the Central Statistics Office. A total of 300 subdistricts were identified in this way.

On net, the selected 300 subdistricts look broadly similar to all of rural Indonesia on the 12 targeted indicators. Specifically, we compared the 300 *Generasi* target subdistricts to the rest of rural Indonesia, excluding the conflict areas of Aceh and Papua, using the 2004 SUSENAS (i.e., before the *Generasi* program began). We find that the primary enrollment rate is 96 percent

in *Generasi* areas and 96 percent in non-*Generasi* areas. The junior secondary enrollment rates are 58 percent in *Generasi* and 61 percent in non-*Generasi* areas. For delivery by trained attendant, the rate is 48 percent in both *Generasi* and non-*Generasi* areas. The only substantial differences are that the rate of completed immunizations is 29 percent in *Generasi* areas vs. 22 percent in non-*Generasi* areas, and the rates for monthly weighings of the youngest child under 5 are 59 percent in *Generasi* areas vs. 48 percent in non-*Generasi* areas.

Each of these 300 subdistricts was then randomly assigned by computer into one of three equal-sized groups: incentivized *Generasi* (100 subdistricts), non-incentivized *Generasi* (100 subdistricts), or control (100 subdistricts). Within a subdistrict, all villages received the same treatment. The randomization was stratified by district (*kabupaten*), to ensure a balanced randomization across the 20 different districts in the study. Note that a total of 36 out of the 300 subdistricts in fact should not have been included in the randomization as they were ineligible for *Generasi* because they had been selected (prior to the randomization) to receive other programs or had had prior implementation problems with previous PNPM programs. Since the eligibility decision was made on the basis of lists determined prior to the randomization, and since we have obtained those lists for treatment and control areas, we exclude ineligible subdistricts in both treatment and control groups from our main analysis.<sup>17</sup>

The *Generasi* program was phased in over two years. In phasing in the program in the first year (2007), the government for budgetary reasons prioritized those locations that had

---

<sup>17</sup>The determination that these subdistricts would be ineligible had been made prior to the randomization, but was not communicated to the study team, which is why they were included in the randomization. Subdistricts were deemed ineligible if they had been allocated to receive the urban poverty program (UPP), conflict area poverty program (SPADA), or if they had had a previous problem with PNPM implementation. We subsequently obtained the pre-randomization lists used to make this determination, and use these pre-randomization lists to restrict our sample (in both treatment and control areas) to those subdistricts that would actually be eligible for the program. Nevertheless, data collection surveys were conducted in all 300 subdistricts that were initially included in the randomization, regardless of the final eligibility, so as a robustness check we can alternatively estimate intent-to-treat effects using the full 300 subdistricts from the original randomization. See Appendix Table 2, Column 9.

previously participated in the PNPM rural infrastructure program (denoted group P), since those locations already had the legal infrastructure for distributing PNPM funds, and it was easier to re-budget other monies to fund *Generasi* in those areas. After all group P subdistricts randomized to receive the program had been funded, the government held another lottery to select which remaining subdistricts (denoted group NP) would be receiving the program in 2007 and which would begin in 2008.<sup>18</sup> By year two of the program (2008) 96% of eligible subdistricts – 174 out of the 181 eligible subdistricts randomized to receive *Generasi* – were receiving the program. The remaining 7 eligible districts received the regular PNPM program instead of *Generasi*. The phase-in and final allocation of *Generasi* is shown in Table 2.

An important consideration for the analysis is the potential for differential provision of other programs in the pure control groups. The main potential avenue through which this might occur is other PNPM programs. Specifically, to ensure a fair allocation of funds, the Ministry of Home Affairs decided that no subdistrict would receive both the *Generasi* program and other PNPM programs, which typically fund local infrastructure (roads, bridges, etc.) and microcredit. In 2007, 17 (out of 83) eligible control subdistricts received other PNPM programs, while no treatment subdistricts did; in 2008, 31 (out of 83) eligible control subdistricts received other PNPM programs, as did the 7 eligible subdistricts that should have been receiving *Generasi* in 2008 but received regular PNPM rural instead. Since regular PNPM programs tend to focus on basic infrastructure, not health and education, it is unlikely that the differential provision of other PNPM programs in control areas will have substantial impacts on the *Generasi* evaluation results. We have also verified empirically that the results are unchanged if we include a dummy

---

<sup>18</sup> Specifically, in 2007 all 105 eligible group P subdistricts randomized to receive the program were funded. In group NP, in 2007 *Generasi* was funded in 22 eligible subdistricts. Of these 22 subdistricts, 21 were chosen randomly by computer, stratified by province, in a second lottery among Group NP locations. Group P status was determined prior to randomization. All but 7 of the remaining NP subdistricts were added in 2008.

for the subdistrict having received the regular PNPM program. (See Appendix Table 2.)

Nevertheless, in interpreting the results, it is important to recognize that some portion of the eligible “pure control” subdistricts received PNPM.

### **Appendix III: Checking for balance of baseline values**

To check for balance across treatment arms, we estimate the relationship between the baseline survey values of the twelve major indicators that are the focus of the program (these indicators are discussed in more detail in Section 3) and the BLOCKGRANTS and INCENTIVES variables. We use the specification as in equation (1) and (2) above (though naturally we don't control for baseline values, since the baseline values are on the left hand side of the regression.)

The balance check is presented in Appendix Table 1. Column (2) shows the total estimated impact of the program in incentivized areas compared to pure controls, obtained by summing the coefficients on BLOCKGRANTS and INCENTIVES, where BLOCKGRANTS is defined based on the randomization results and prioritization rules for year 1 implementation. Column (3) shows the total estimated impact of the program in non-incentivized areas, which is the coefficient on the BLOCKGRANTS variable. Column (4) shows the effect of the incentives relative to the non-incentives, which is the coefficient on INCENTIVES. Each row corresponds to a separate regression. Columns (5) – (7) repeat the same regressions, but with BLOCKGRANTS and BLOCKGRANTS incentives based on the randomization results for treatment in either year.

Looking across columns (2) through (7), we find that of the seventy-two coefficients estimated, eight are statistically significant at the 10 percent level or higher, which is precisely what would be predicted by random chance. Similarly, four of seventy-two coefficients are statistically significant at the 5 percent level or higher, and one is statistically significant at the 1 percent level, which is also what one would expect based on random chance. These results

confirm that the randomization was indeed carried out properly and that the treatment and control groups are balanced.

The final rows of Appendix Table 1 consider the average standardized effects. We report average standardized effects for all twelve of the main indicators, and then separately report average standardized effects for the eight health indicators and four education indicators. Three of the eighteen coefficients are statistically significant at the 10 percent level, once again consistent with what one would expect based on random chance. One coefficient is statistically significant at the 1 percent level, which we regard as a fluke. Most important, none of the average standardized effects for the additional effect of the incentives (columns 4 and 7), which are the key coefficients of interest for this paper, show any statistically significant differences at baseline.

## Appendix IV: Data

The sample for the surveys covers each of the 300 subdistricts that were included in the original *Generasi* randomization (i.e. the 264 eligible subdistricts plus 36 ineligible subdistricts). In each subdistrict, eight villages were randomly selected (unless the subdistrict had fewer than eight villages, in which case all were selected), resulting in a total of 2,313 villages that were sampled in each of the three survey waves. Approximately 12,000 households were interviewed in each survey wave, as well as more than 8,000 village officials and health and education providers.

The sampling design for the household component of the *Generasi* surveys was chosen to ensure adequate coverage in the key *Generasi* demographic groups: mothers who recently were pregnant or gave birth, children under age 3, and children of school age. Within each village, one hamlet (*dusun*) was randomly selected, and a list of all households was obtained from the head of the hamlet. Five households were randomly sampled from that list to be interviewed. These households were stratified so that two selected households had at least one child under age 2, two selected households had a child under age 15 but no children under age 2, and one household had no children under age 15. In Wave II and Wave III, in half of the randomly selected villages (four villages out of the eight villages sampled in every subdistrict), the same households sampled in Wave I were contacted again in subsequent waves to form an individual level panel.<sup>19</sup> In the other half of villages, a new cross-section of households was drawn in each survey wave. The combination of panel households and non-panel households allows us to investigate

---

<sup>19</sup> Teams tracked and re-interviewed migrated or split households who provided information for any of the married women or children modules, as long as they were within the same subdistrict. In panel areas, 95% of target households were able to be reinterviewed in Wave 2 and 98% of target households were able to be reinterviewed in Wave 3.

heterogeneous treatment effects based on pre-period income levels and other characteristics, while at the same time ensuring that sufficient respondents with recent births and young children are enrolled in the survey sample in every round. Additional details about the surveys can be found in Olken, Onishi and Wong (2011).

## Appendix V: Cost-Effectiveness

The challenge in doing a cost-effectiveness calculation in this context is that there are many potential outcomes, and we do not necessarily know how to apportion the costs of the programs among the various outcomes. We therefore take the following approach: as in Section 3, we calculate the total number of “points” the program created, using the weighting scheme agreed upon in advance and shown in Table 1 and the point estimates for the impact of the program from Table 3.<sup>20</sup> We divide the total cost of the program by the total number of points created to generate a “cost per point”, which can then be interpreted using the point values in Table 1. While naturally different weighting schemes could produce different answers, we use the points in the program since they presumably represent the government’s relative weightings of the different interventions, i.e. we use a set of relative prices that should roughly correspond to the relative weights the government places on the various indicators.

To calculate the costs of the program, we divide the expenditures into transfers to households and real expenditures (i.e. real allocation of resources). For transfers, we assume that transfers are valued by recipients at cost, so the real social cost of transfers is the social deadweight loss of taxation to raise the funds for the transfers. For non-transfer costs (such as hiring a midwife), the social cost is the expenditure plus the deadweight loss of taxation. For the purposes of evaluating *Generasi*, we count school supplies, school fee subsidies, health care subsidies, and supplementary food as transfers, and all other expenditures as real expenditures. As shown in Table 8 above, about 75% of the block grant is spent on transfers by these definitions. We also include the cost of the facilitators who administer the program as real

---

<sup>20</sup> Note that the number of points shown in this section is approximately half the total number of points reported in Table 3. The reason is that Table 3 is calculated using the total number of beneficiaries in the program, whereas in this section since we are mapping it to points we use number of beneficiaries in the particular treatment group only, which is half of the total.

expenditures. We use the consensus estimate of the marginal cost of public funds of 0.3 (Ballard, Shoven, and Whalley 1985), though we note that there are not reliable estimates of this parameter for developing countries. We use the Wave III impact results (at the end of the program's second year), when the program was at full scale, for this calculation.

The estimates are presented in Appendix Table 12. The key results are shown in the first two columns of Panel A: *Generasi* with incentives had a real cost per point of about \$8, and *Generasi* without incentives had a real cost per point of about \$11. Since the estimates in Table 3 show that, for year 3, the difference in the total number of points between incentivized and non-incentivized versions of the program is not significantly different, we should treat the difference between \$8 and \$11 as also not statistically significant. Panel B separately estimates the cost effectiveness for the health and education components of the program, allocating facilitation costs equally between the two portions of the program and allocating expenditures based on how communities actually allocated block grants. For health, this yields estimates of \$7 per point for the incentivized version and \$9 for the non-incentivized version. For education, this yields estimates of \$13 per point for the incentivized version and \$16 for the non-incentivized version.

How do we interpret the \$8 - \$11 per point average cost effectiveness of the program? One approach is to back out what this implies to move a given indicator. Applying the weights from Table 1, for example, suggests that the cost of additional child weight check was \$16 - \$22, the cost of preventing one malnourished child was \$384 - \$528, the cost of getting one additional child fully covered with Vitamin A was \$160 - \$220, and the cost of enrolling one more child in primary school was \$200 - \$275.

Are these numbers large or small? While that is ultimately a judgment question for the reader, we provide two benchmarks. First, the closest comparison is Indonesia's conditional cash

transfer program (PKH). The PKH program was conducted at the same time and evaluated using a randomized evaluation using the same survey instruments as *Generasi*, though it was conducted in somewhat different areas of the country (more urban and with better supply of services), and was targeted at the same set of indicators. We use the randomized evaluation results from Alatas (2011) of the PKH program, combined with the same weights in Table 1.<sup>21</sup> Alatas reports an estimated effect just for those households receiving PKH, as well as a “placement effect” on all poor households in the subdistricts regardless of whether they received PKH or not. We report cost-effectiveness numbers based on both calculations. The results suggest that, if one focuses only on the benefits enjoyed by PKH households, *Generasi* is more cost effective – with the \$8 – \$11 per point in *Generasi* comparing to about \$22 per point for PKH. If one includes estimated spillover effects from PKH to non-recipient households in the same subdistricts, then the \$8 - \$11 per point for *Generasi* is comparable to the \$11 per point estimate for PKH.<sup>22</sup> Thus, the *Generasi* program looks roughly comparable to an alternative program tried in Indonesia at the same time.

An alternative benchmark is to look at international comparisons. For example, school-based deworming in Kenya costs \$3.50 per additional year of school attendance, and iron and deworming tablets in India cost \$29 per additional year of school attendance. School meals in Kenya cost \$35 per additional year of attendance, and school uniforms cost about \$100 per additional year of attendance (JPAL 2011). By comparison, *Generasi* would cost between \$125 -

---

<sup>21</sup> We calculate the number of households of different age ranges from the PKH survey data on all PKH respondents. For spillovers, we assume that there are 2 non-PKH households for every one PKH household. This is consistent with the data used in the PKH evaluation, which consisted of a survey of previous cash transfer recipients and is the population over which they estimate spillovers. If there are spillovers to other parts of the population, this may be an underestimate.

<sup>22</sup> It is also worth noting that neither calculation includes the benefits from redistribution.

\$400 per additional year schooling.<sup>23</sup> By this metric, *Generasi* as a whole is substantially less cost-effective than these other interventions, although it is worth noting that *Generasi* affects enrollment rates, whereas the international comparisons affect attendance, and that there is already high baseline enrollment in *Generasi* areas, which makes the marginal cost higher.

While these numbers suggest that *Generasi*, as a whole, may be more expensive than these other programs, the performance incentives themselves – at \$0.62 per point, which translates into \$16 per additional child enrolled in school and \$30 per case of malnutrition avoided – compares favorably with all of the above interventions except deworming. The reason the incentives themselves are cost effective is that in our case they are essentially free – the block grant was the same with and without incentives, and collecting the data used to validate the incentives was done in both the incentivized and non-incentivized versions of the program, so the only “costs” come from the fact that there were slightly more real expenditures and slightly fewer transfers in the incentivized version of the program. This suggests that while the *Generasi* program as a whole was not as cost effective as some other international comparators, adding incentives to existing programs may be a cost-effective way to improve performance.

---

<sup>23</sup> Note that these estimates are not strictly comparable to the estimates in Appendix Table 12, since they count all program expenditures at cost regardless of whether they were transfers or not, and do not include the deadweight loss of taxation. When we redo the *Generasi* cost-effectiveness in this way, we obtain a cost per point of around \$12. See Appendix Table 13.

**Appendix Table 1: Balance checks using baseline data, 12 main indicators**

Indicator	Baseline Data, Effect of Year 1 Treatment Dummy				Baseline Data, Effect of Year 1 or 2 Treatment		
	Control Group Mean	Incentive Treatment Effect	Non- Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non- Incentive Treatment Effect	Incentive Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Number prenatal visits	7.808 [4.4482]	-0.341 (0.263)	-0.125 (0.267)	-0.216 (0.259)	-0.3794* (0.228)	-0.186 (0.223)	-0.194 (0.208)
Delivery by trained midwife	0.691 [0.4623]	-0.020 (0.029)	-0.026 (0.030)	0.005 (0.031)	-0.035 (0.026)	-0.018 (0.026)	-0.017 (0.025)
Number of postnatal visits	3.012 [3.3234]	-0.010 (0.196)	0.195 (0.211)	-0.206 (0.199)	-0.080 (0.190)	0.023 (0.192)	-0.102 (0.172)
Iron tablet sachets	1.591 [1.2790]	-0.071 (0.070)	-0.018 (0.078)	-0.054 (0.073)	-0.058 (0.066)	0.008 (0.067)	-0.065 (0.061)
Percent of immunization	0.680 [0.3519]	-0.0381* (0.021)	-0.036 (0.023)	-0.003 (0.023)	-0.0509*** (0.019)	-0.0416** (0.019)	-0.009 (0.018)
Number of weight checks	2.140 [1.1898]	-0.091 (0.060)	-0.047 (0.069)	-0.044 (0.065)	-0.1509** (0.058)	-0.046 (0.059)	-0.1053* (0.055)
Number Vitamin A supplements	1.521 [1.1686]	0.097 (0.061)	-0.031 (0.063)	0.1275* (0.066)	0.057 (0.058)	-0.035 (0.060)	0.0922* (0.056)
Percent malnourished	0.173 [0.3784]	0.022 (0.016)	0.006 (0.015)	0.015 (0.017)	0.009 (0.014)	0.001 (0.014)	0.008 (0.014)
Age 7–12 participation rate	0.950 [0.2191]	0.006 (0.009)	-0.006 (0.009)	0.012 (0.008)	0.000 (0.008)	0.001 (0.008)	-0.001 (0.008)
Age 13–15 participation rate	0.825 [0.3801]	0.017 (0.027)	0.000 (0.028)	0.017 (0.027)	0.001 (0.024)	0.018 (0.025)	-0.016 (0.022)
Age 7–12 gross attendance	0.910 [0.2685]	-0.006 (0.014)	-0.0287** (0.014)	0.023 (0.016)	-0.011 (0.013)	-0.011 (0.012)	0.000 (0.013)
Age 13–15 gross attendance	0.752 [0.4196]	0.036 (0.031)	0.003 (0.032)	0.033 (0.033)	0.027 (0.029)	0.036 (0.030)	-0.009 (0.027)
Average standardized effect		-0.016 (0.023)	-0.029 (0.024)	0.013 (0.023)	-0.0365* (0.021)	-0.012 (0.022)	-0.024 (0.020)
Average standardized effect health		-0.0415* (0.025)	-0.027 (0.029)	-0.014 (0.026)	-0.0589*** (0.022)	-0.032 (0.024)	-0.027 (0.022)
Average standardized effect educ.		0.035 (0.047)	-0.031 (0.050)	0.066 (0.049)	0.008 (0.042)	0.026 (0.044)	-0.018 (0.040)

Notes: Each row of columns (2) – (4) and (5) – (7) shows coefficients from a regression of the variable shown on an incentive treatment dummy, a non-incentive treatment dummy, district fixed effects, and province \* group P fixed effects. Robust standard errors in parentheses, adjusted for clustering at the subdistrict level. In columns (2) – (4) the treatment variable is defined based on year 1 program placement, and in columns (5) – (7) it is defined based on year 2 program placement. Columns (4) and (7) are the calculated difference between the previous two columns. All treatment variables are defined using the original randomization, and so are interpretable as intent-to-treat estimates. Average standardized effects reported in the bottom three rows are calculated using the estimated coefficients from the 12 individual regressions above using the formula shown in the text, adjusted for arbitrary cross-equation clustering of standard errors within subdistricts. \* = 10% significance, \*\* = 5% significance, \*\*\* = 1% significance.

## Appendix Table 2: Robustness of main results to alternative specifications

Wave II

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Indicator	Baseline mean	Control mean	Main specification	Baseline controls for all 12 indicators	Baseline controls for kecamatan averages only (no individual panel)	No controls	First differences	Kecamatan level regression, with baseline control	Full Intent-to-treat on 300 kecamatan, controlling for kecamatan avg
Number prenatal visits	7.447 [4.2935]	7.464 [4.1639]	0.6129*** (0.220)	0.5661*** (0.216)	0.5885*** (0.218)	0.4963** (0.236)	0.8315*** (0.273)	0.5883** (0.241)	0.5219** (0.209)
Delivery by trained midwife	0.670 [0.4705]	0.755 [0.4303]	-0.005 (0.025)	0.000 (0.024)	-0.001 (0.026)	0.005 (0.030)	-0.011 (0.032)	0.010 (0.027)	0.007 (0.026)
Number of postnatal visits	1.720 [2.4477]	1.737 [2.4079]	-0.104 (0.140)	-0.146 (0.136)	-0.090 (0.142)	-0.106 (0.144)	-0.059 (0.185)	-0.105 (0.159)	-0.073 (0.137)
Iron tablet sachets	1.588 [1.2554]	1.977 [1.4426]	0.078 (0.081)	0.071 (0.081)	0.077 (0.081)	0.070 (0.081)	0.135 (0.102)	0.074 (0.085)	0.056 (0.077)
Percent of immunization	0.653 [0.3664]	0.693 [0.3441]	0.015 (0.018)	0.015 (0.018)	0.015 (0.018)	0.013 (0.020)	0.029 (0.027)	0.012 (0.022)	0.008 (0.018)
Number of weight checks	2.126 [1.1895]	2.192 [1.1718]	0.0958* (0.054)	0.1010* (0.056)	0.0970* (0.054)	0.085 (0.058)	0.1310* (0.072)	0.1125* (0.061)	0.1113** (0.053)
Number Vitamin A supplements	1.529 [1.1370]	1.560 [1.0089]	-0.013 (0.058)	-0.013 (0.057)	-0.004 (0.059)	0.000 (0.062)	-0.077 (0.090)	-0.019 (0.066)	0.016 (0.060)
Percent malnourished	0.168 [0.3739]	0.199 [0.3995]	-0.0265* (0.016)	-0.023 (0.016)	-0.024 (0.016)	-0.023 (0.015)	-0.0396* (0.023)	-0.018 (0.017)	-0.021 (0.015)
Age 7–12 gross enrollment	0.948 [0.2221]	0.982 [0.1334]	-0.004 (0.006)	-0.004 (0.005)	-0.004 (0.006)	-0.002 (0.006)	-0.0184* (0.011)	-0.004 (0.006)	-0.006 (0.005)
Age 13–15 gross enrollment	0.822 [0.3827]	0.906 [0.2928]	0.016 (0.024)	0.013 (0.022)	0.012 (0.025)	0.019 (0.025)	-0.003 (0.035)	-0.003 (0.026)	0.023 (0.024)
Age 7–12 gross attendance	0.904 [0.2773]	0.956 [0.1568]	-0.001 (0.006)	-0.001 (0.006)	-0.001 (0.006)	0.000 (0.006)	-0.012 (0.026)	-0.001 (0.006)	-0.006 (0.006)
Age 13–15 gross attendance	0.768 [0.4125]	0.884 [0.3022]	0.025 (0.025)	0.025 (0.023)	0.012 (0.026)	0.021 (0.026)	-0.025 (0.040)	-0.003 (0.028)	0.023 (0.025)
Average standardized effect			0.036 (0.024)	0.033 (0.022)	0.032 (0.024)	0.035 (0.027)	0.017 (0.029)	0.049 (0.060)	0.034 (0.023)
Average standardized effect health			0.0406* (0.024)	0.0374* (0.023)	0.0418* (0.024)	0.038 (0.029)	0.0545** (0.027)	0.0946* (0.057)	0.0418* (0.023)
Average standardized effect educ.			0.027 (0.045)	0.024 (0.041)	0.013 (0.047)	0.031 (0.049)	-0.058 (0.067)	-0.044 (0.119)	0.019 (0.045)

Note: See Notes to Table 3. Reported coefficients in columns (3)–(11) are the coefficients on the additional effect of the incentives, i.e. as in columns (4), (7), and (10) of Table 3. Column (3) repeats the analogous regression from Table 3. Column (4) adds baseline controls for all 12 indicators in all regressions, not just the dependent variable of the regression. Column (5) includes baseline controls for subdistrict baseline average values, rather than also including individual controls. Column (6) has no baseline control variables. Column (7) is estimated using first-differences, rather than controlling for baseline values. Column (8) aggregates all data to the subdistrict level, with one observation per subdistrict, controlling for the subdistrict baseline average. Column (9) is the full “intent-to-treat” indicator on all 300 subdistricts included in the original randomization, rather than the 264 eligible subdistricts. Column (10) sets all baseline values conducted after Generasi fieldwork began to missing. Column (11) adds controls for whether the subdistrict also received the regular non-Generasi PNPM program.

Indicator	(10) Baseline conducted after initial fieldwork set to missing	(11) Controls for PNPM
Number prenatal visits	0.6474*** (0.226)	0.6123*** (0.220)
Delivery by trained midwife	0.014 (0.026)	-0.005 (0.025)
Number of postnatal visits	-0.076 (0.142)	-0.103 (0.140)
Iron tablet sachets	0.085 (0.082)	0.078 (0.081)
Percent of immunization	0.017 (0.019)	0.015 (0.018)
Number of weight checks	0.083 (0.055)	0.0958* (0.054)
Number Vitamin A supplements	-0.004 (0.058)	-0.013 (0.058)
Percent malnourished	-0.0272* (0.015)	-0.0260* (0.016)
Age 7–12 gross enrollment	-0.003 (0.006)	-0.004 (0.006)
Age 13–15 gross enrollment	0.011 (0.024)	0.016 (0.024)
Age 7–12 gross attendance	0.000 (0.006)	-0.001 (0.006)
Age 13–15 gross attendance	0.020 (0.025)	0.025 (0.025)
Average standardized effect	0.0396* (0.024)	0.036 (0.024)
Average standardized effect health	0.0496** (0.025)	0.0405* (0.024)
Average standardized effect educ.	0.020 (0.045)	0.028 (0.045)

Wave III

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Indicator	Baseline mean	Control mean	Main specification	Baseline controls for all 12 indicators	Baseline controls for kecamatan averages only (no individual panel)	No controls	First differences	Kecamatan level regression, with baseline control	Full Intent-to-treat on 300 kecamatan, controlling for kecamatan avg
Number prenatal visits	7.447 [4.2935]	7.639 [4.2297]	0.181 (0.173)	0.187 (0.174)	0.186 (0.173)	0.134 (0.173)	0.368 (0.257)	0.231 (0.187)	0.098 (0.165)
Delivery by trained midwife	0.670 [0.4705]	0.780 [0.4144]	0.019 (0.021)	0.018 (0.021)	0.021 (0.021)	0.021 (0.022)	0.020 (0.031)	0.015 (0.023)	0.018 (0.021)
Number of postnatal visits	1.720 [2.4477]	1.634 [2.4597]	-0.003 (0.129)	0.032 (0.129)	-0.001 (0.129)	-0.017 (0.129)	0.057 (0.163)	-0.048 (0.137)	-0.017 (0.122)
Iron tablet sachets	1.588 [1.2554]	1.741 [1.2748]	0.031 (0.063)	0.026 (0.064)	0.032 (0.063)	0.029 (0.064)	0.083 (0.083)	0.026 (0.069)	0.002 (0.060)
Percent of immunization	0.653 [0.3664]	0.756 [0.2858]	0.017 (0.014)	0.017 (0.014)	0.017 (0.014)	0.012 (0.015)	0.025 (0.020)	0.008 (0.016)	0.013 (0.013)
Number of weight checks	2.126 [1.1895]	2.262 [1.1204]	-0.024 (0.051)	-0.017 (0.049)	-0.024 (0.051)	-0.052 (0.052)	0.058 (0.068)	-0.046 (0.054)	-0.021 (0.048)
Number Vitamin A supplements	1.529 [1.1370]	1.454 [0.9520]	0.083 (0.053)	0.1059** (0.051)	0.083 (0.053)	0.055 (0.057)	-0.012 (0.081)	0.005 (0.067)	0.070 (0.052)
Percent malnourished	0.168 [0.3739]	0.228 [0.4199]	0.009 (0.016)	0.007 (0.017)	0.009 (0.016)	0.009 (0.016)	0.001 (0.023)	0.009 (0.017)	0.006 (0.015)
Age 7–12 gross enrollment	0.948 [0.2221]	0.985 [0.1207]	-0.006 (0.005)	-0.004 (0.004)	-0.005 (0.005)	-0.005 (0.005)	-0.012 (0.009)	-0.004 (0.005)	-0.005 (0.004)
Age 13–15 gross enrollment	0.822 [0.3827]	0.874 [0.3327]	0.007 (0.014)	0.011 (0.014)	0.011 (0.014)	0.011 (0.015)	0.034 (0.026)	0.011 (0.017)	0.019 (0.014)
Age 7–12 gross attendance	0.904 [0.2773]	0.960 [0.1463]	-0.001 (0.006)	0.000 (0.006)	-0.001 (0.006)	-0.001 (0.006)	0.006 (0.021)	0.002 (0.006)	0.000 (0.006)
Age 13–15 gross attendance	0.768 [0.4125]	0.860 [0.3364]	0.010 (0.015)	0.019 (0.015)	0.012 (0.015)	0.017 (0.016)	0.002 (0.033)	0.015 (0.019)	0.017 (0.015)
Average standardized effect			0.018 (0.019)	0.027 (0.019)	0.021 (0.019)	0.015 (0.020)	0.032 (0.027)	0.020 (0.052)	0.018 (0.018)
Average standardized effect health			0.026 (0.022)	0.032 (0.022)	0.027 (0.022)	0.016 (0.023)	0.041 (0.028)	0.013 (0.052)	0.018 (0.021)
Average standardized effect educ.			0.003 (0.027)	0.016 (0.027)	0.008 (0.027)	0.013 (0.027)	0.016 (0.051)	0.035 (0.093)	0.020 (0.027)

Indicator	(10) Baseline conducted after initial fieldwork set to missing	(11) Controls for PNPM
Number prenatal visits	0.183 (0.175)	0.173 (0.172)
Delivery by trained midwife	0.027 (0.021)	0.019 (0.021)
Number of postnatal visits	0.002 (0.130)	-0.004 (0.129)
Iron tablet sachets	0.028 (0.064)	0.029 (0.063)
Percent of immunization	0.016 (0.014)	0.017 (0.014)
Number of weight checks	-0.040 (0.052)	-0.026 (0.050)
Number Vitamin A supplements	0.082 (0.052)	0.083 (0.053)
Percent malnourished	0.010 (0.016)	0.010 (0.016)
Age 7–12 gross enrollment	-0.006 (0.005)	-0.006 (0.005)
Age 13–15 gross enrollment	0.005 (0.015)	0.007 (0.014)
Age 7–12 gross attendance	-0.001 (0.006)	-0.001 (0.006)
Age 13–15 gross attendance	0.008 (0.016)	0.009 (0.015)
Average standardized effect	0.017 (0.020)	0.017 (0.019)
Average standardized effect health	0.026 (0.023)	0.025 (0.022)
Average standardized effect educ.	-0.001 (0.027)	0.002 (0.027)

*Pooled*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Indicator	Baseline mean	Control mean	Main specification	Baseline controls for all 12 indicators	Baseline controls for kecamatan averages only (no individual panel)	No controls	First differences	Kecamatan level regression, with baseline control	Full Intent-to-treat on 300 kecamatan, controlling for kecamatan avg
Number prenatal visits	7.447 [4.2935]	7.551 [4.1963]	0.3706** (0.147)	0.3547** (0.146)	0.3622** (0.147)	0.2925* (0.155)	0.5711** (0.225)	0.3782** (0.148)	0.2811** (0.143)
Delivery by trained midwife	0.670 [0.4705]	0.768 [0.4223]	0.009 (0.018)	0.011 (0.018)	0.012 (0.019)	0.015 (0.021)	0.007 (0.027)	0.013 (0.017)	0.014 (0.018)
Number of postnatal visits	1.720 [2.4477]	1.685 [2.4339]	-0.048 (0.101)	-0.047 (0.099)	-0.041 (0.102)	-0.056 (0.105)	0.003 (0.144)	-0.072 (0.104)	-0.043 (0.096)
Iron tablet sachets	1.588 [1.2554]	1.860 [1.3669]	0.052 (0.051)	0.047 (0.049)	0.052 (0.051)	0.047 (0.051)	0.106 (0.074)	0.046 (0.054)	0.026 (0.049)
Percent of immunization	0.653 [0.3664]	0.724 [0.3183]	0.016 (0.011)	0.017 (0.011)	0.016 (0.011)	0.012 (0.012)	0.027 (0.020)	0.010 (0.013)	0.011 (0.011)
Number of weight checks	2.126 [1.1895]	2.227 [1.1464]	0.028 (0.040)	0.034 (0.040)	0.028 (0.041)	0.007 (0.043)	0.089 (0.061)	0.019 (0.041)	0.035 (0.040)
Number Vitamin A supplements	1.529 [1.1370]	1.507 [0.9819]	0.037 (0.038)	0.050 (0.039)	0.042 (0.039)	0.029 (0.040)	-0.043 (0.072)	-0.005 (0.048)	0.045 (0.037)
Percent malnourished	0.168 [0.3739]	0.214 [0.4100]	-0.006 (0.013)	-0.006 (0.013)	-0.005 (0.013)	-0.005 (0.012)	-0.017 (0.020)	-0.002 (0.012)	-0.006 (0.012)
Age 7–12 gross enrollment	0.948 [0.2221]	0.984 [0.1274]	-0.005 (0.004)	-0.004 (0.004)	-0.005 (0.004)	-0.004 (0.004)	-0.015 (0.009)	-0.004 (0.004)	-0.005 (0.004)
Age 13–15 gross enrollment	0.822 [0.3827]	0.891 [0.3125]	0.011 (0.014)	0.011 (0.013)	0.011 (0.015)	0.014 (0.015)	0.019 (0.025)	0.005 (0.015)	0.020 (0.015)
Age 7–12 gross attendance	0.904 [0.2773]	0.958 [0.1517]	-0.001 (0.005)	0.000 (0.005)	-0.001 (0.005)	0.000 (0.005)	-0.001 (0.022)	0.001 (0.005)	-0.002 (0.005)
Age 13–15 gross attendance	0.768 [0.4125]	0.872 [0.3189]	0.015 (0.015)	0.020 (0.014)	0.011 (0.015)	0.018 (0.016)	-0.009 (0.032)	0.007 (0.016)	0.019 (0.015)
Average standardized effect			0.025 (0.016)	0.0283* (0.016)	0.025 (0.016)	0.023 (0.018)	0.027 (0.024)	0.031 (0.042)	0.025 (0.016)
Average standardized effect health			0.0327* (0.018)	0.0336* (0.018)	0.0327* (0.018)	0.025 (0.021)	0.0462* (0.024)	0.047 (0.043)	0.028 (0.018)
Average standardized effect educ.			0.009 (0.027)	0.018 (0.025)	0.009 (0.027)	0.019 (0.028)	-0.012 (0.052)	-0.001 (0.078)	0.019 (0.027)

Indicator	(10) Baseline conducted after initial fieldwork set to missing	(11) Controls for PNPM
Number prenatal visits	0.3861** (0.152)	0.3669** (0.147)
Delivery by trained midwife	0.022 (0.018)	0.009 (0.018)
Number of postnatal visits	-0.034 (0.103)	-0.048 (0.101)
Iron tablet sachets	0.053 (0.051)	0.051 (0.051)
Percent of immunization	0.017 (0.012)	0.016 (0.011)
Number of weight checks	0.013 (0.042)	0.027 (0.040)
Number Vitamin A supplements	0.041 (0.038)	0.037 (0.038)
Percent malnourished	-0.006 (0.012)	-0.006 (0.013)
Age 7–12 gross enrollment	-0.005 (0.004)	-0.005 (0.004)
Age 13–15 gross enrollment	0.007 (0.014)	0.011 (0.014)
Age 7–12 gross attendance	-0.001 (0.005)	-0.001 (0.005)
Age 13–15 gross attendance	0.012 (0.015)	0.015 (0.015)
Average standardized effect	0.026 (0.017)	0.024 (0.016)
Average standardized effect health	0.0356* (0.019)	0.0311* (0.018)
Average standardized effect educ.	0.006 (0.026)	0.011 (0.026)

**Appendix Table 3: Regional Heterogeneity for Main 12 Indicators**

Wave II

Indicator	Wave II								
	Java Incentive Treatment Effect	Additional NTT Incentive Treatment Effect	Additional Sulawesi Incentive Treatment Effect	Java Non-Incentive Treatment Effect	Additional NTT Non-Incentive Treatment Effect	Additional Sulawesi Non-Incentive Treatment Effect	Java Incentive Additional Effect	Additional NTT Incentive Additional Effect	Additional Sulawesi Incentive Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Main 12 indicators</i>									
Number prenatal visits	0.4776* (0.270)	-0.9764* (0.506)	0.594 (0.822)	0.059 (0.239)	-1.2910*** (0.488)	-0.331 (0.629)	0.4182* (0.245)	0.315 (0.445)	0.925 (0.928)
Delivery by trained midwife	0.022 (0.028)	-0.030 (0.073)	0.1319** (0.062)	0.0773*** (0.028)	-0.1734** (0.071)	0.031 (0.058)	-0.0555** (0.028)	0.1432** (0.064)	0.1013* (0.053)
Number of postnatal visits	-0.4151** (0.175)	0.479 (0.309)	0.8517** (0.361)	0.006 (0.160)	-0.4424* (0.244)	0.281 (0.353)	-0.4207** (0.171)	0.9216*** (0.292)	0.571 (0.433)
Iron tablet sachets	0.109 (0.115)	0.062 (0.172)	0.033 (0.226)	0.159 (0.110)	-0.232 (0.176)	-0.3834** (0.187)	-0.051 (0.107)	0.2936* (0.172)	0.4166* (0.219)
Percent of immunization	0.000 (0.018)	0.045 (0.043)	0.1194* (0.070)	-0.013 (0.022)	0.062 (0.038)	0.049 (0.059)	0.013 (0.023)	-0.017 (0.041)	0.070 (0.060)
Number of weight checks	0.1212** (0.061)	0.028 (0.101)	0.265 (0.209)	0.030 (0.067)	0.056 (0.111)	0.152 (0.123)	0.092 (0.065)	-0.028 (0.120)	0.114 (0.186)
Number Vitamin A supplements	0.072 (0.060)	-0.3298*** (0.123)	-0.046 (0.189)	0.016 (0.070)	-0.134 (0.124)	0.099 (0.168)	0.056 (0.072)	-0.1957* (0.114)	-0.145 (0.243)
Percent malnourished	0.006 (0.018)	-0.0638* (0.039)	-0.037 (0.055)	0.008 (0.017)	0.001 (0.038)	0.014 (0.043)	-0.002 (0.019)	-0.0643* (0.036)	-0.051 (0.060)
Age 7–12 gross enrollment	-0.004 (0.005)	0.019 (0.013)	-0.011 (0.019)	0.002 (0.005)	0.010 (0.014)	-0.009 (0.018)	-0.006 (0.006)	0.010 (0.013)	-0.003 (0.023)
Age 13–15 gross enrollment	-0.036 (0.026)	-0.030 (0.047)	0.077 (0.049)	-0.018 (0.030)	-0.034 (0.046)	-0.1481** (0.059)	-0.018 (0.031)	0.004 (0.046)	0.2247*** (0.063)
Age 7–12 gross attendance	-0.003 (0.006)	0.0243** (0.012)	-0.024 (0.021)	0.003 (0.006)	0.004 (0.013)	-0.014 (0.015)	-0.006 (0.006)	0.020 (0.013)	-0.010 (0.023)
Age 13–15 gross attendance	-0.042 (0.027)	-0.030 (0.047)	0.076 (0.051)	-0.028 (0.030)	-0.042 (0.047)	-0.1640*** (0.063)	-0.014 (0.033)	0.012 (0.048)	0.2404*** (0.066)
Average standardized effect	-0.007 (0.026)	-0.001 (0.053)	0.1434** (0.066)	0.014 (0.027)	-0.0934** (0.046)	-0.086 (0.063)	-0.020 (0.029)	0.0924* (0.049)	0.2296*** (0.075)
Average standardized effect health	0.029 (0.027)	-0.011 (0.053)	0.1778** (0.071)	0.036 (0.029)	-0.1194** (0.053)	0.022 (0.062)	-0.007 (0.028)	0.1082** (0.049)	0.1561* (0.081)
Average standardized effect educ.	-0.078 (0.049)	0.019 (0.094)	0.075 (0.094)	-0.031 (0.055)	-0.042 (0.088)	-0.3017** (0.129)	-0.047 (0.059)	0.061 (0.090)	0.3764*** (0.129)

Notes: See Notes to Table 3. Each row reports a single regression with both treatment dummies interacted with NTT and Sulawesi dummies.

## Wave III

Indicator	Wave III								
	Java Incentive Treatment Effect	Additional NTT Incentive Treatment Effect	Additional Sulawesi Incentive Treatment Effect	Java Non-Incentive Treatment Effect	Additional NTT Non-Incentive Treatment Effect	Additional Sulawesi Non-Incentive Treatment Effect	Java Incentive Additional Effect	Additional NTT Incentive Additional Effect	Additional Sulawesi Incentive Additional Effect
<i>Main 12 indicators</i>									
Number prenatal visits	0.130 (0.225)	0.136 (0.528)	-0.041 (0.542)	-0.012 (0.216)	-0.055 (0.536)	0.019 (0.538)	0.142 (0.210)	0.192 (0.409)	-0.060 (0.612)
Delivery by trained midwife	0.019 (0.024)	-0.034 (0.062)	0.001 (0.051)	0.024 (0.024)	-0.107 (0.071)	-0.053 (0.058)	-0.005 (0.023)	0.073 (0.057)	0.054 (0.071)
Number of postnatal visits	-0.190 (0.173)	0.4893* (0.291)	0.312 (0.316)	-0.085 (0.169)	0.094 (0.287)	0.223 (0.306)	-0.105 (0.170)	0.395 (0.275)	0.089 (0.371)
Iron tablet sachets	0.079 (0.072)	-0.035 (0.149)	0.069 (0.147)	0.092 (0.086)	-0.094 (0.164)	-0.189 (0.162)	-0.014 (0.085)	0.059 (0.142)	0.2572* (0.153)
Percent of immunization	-0.011 (0.017)	0.076 (0.046)	0.047 (0.043)	-0.008 (0.015)	0.002 (0.045)	0.014 (0.049)	-0.003 (0.015)	0.0741** (0.036)	0.033 (0.049)
Number of weight checks	0.1124* (0.067)	0.143 (0.138)	0.256 (0.156)	0.1831*** (0.063)	0.064 (0.134)	-0.017 (0.166)	-0.071 (0.062)	0.080 (0.112)	0.273 (0.189)
Number Vitamin A supplements	0.063 (0.060)	0.030 (0.124)	0.111 (0.128)	0.048 (0.071)	-0.176 (0.131)	-0.039 (0.137)	0.015 (0.068)	0.2061* (0.115)	0.150 (0.148)
Percent malnourished	0.004 (0.017)	-0.0820** (0.038)	-0.036 (0.040)	-0.010 (0.018)	-0.0859** (0.036)	0.025 (0.050)	0.014 (0.019)	0.004 (0.045)	-0.061 (0.048)
Age 7–12 gross enrollment	-0.005 (0.004)	0.0362*** (0.011)	0.008 (0.016)	-0.003 (0.005)	0.0454*** (0.009)	0.010 (0.014)	-0.002 (0.005)	-0.009 (0.012)	-0.003 (0.017)
Age 13–15 gross enrollment	0.020 (0.021)	0.009 (0.041)	-0.008 (0.054)	0.025 (0.020)	-0.013 (0.043)	-0.065 (0.049)	-0.005 (0.018)	0.023 (0.036)	0.057 (0.043)
Age 7–12 gross attendance	-0.007 (0.007)	0.0409** (0.016)	-0.009 (0.024)	-0.0130** (0.006)	0.0524*** (0.014)	0.024 (0.017)	0.006 (0.007)	-0.012 (0.016)	-0.033 (0.025)
Age 13–15 gross attendance	0.027 (0.022)	0.014 (0.044)	-0.022 (0.055)	0.033 (0.021)	-0.029 (0.045)	-0.073 (0.047)	-0.006 (0.020)	0.044 (0.037)	0.051 (0.043)
Average standardized effect	0.020 (0.022)	0.1060** (0.053)	0.055 (0.062)	0.0309* (0.019)	0.022 (0.047)	-0.038 (0.063)	-0.011 (0.021)	0.0845* (0.044)	0.092 (0.080)
Average standardized effect health	0.021 (0.026)	0.091 (0.062)	0.093 (0.064)	0.036 (0.025)	-0.027 (0.060)	-0.030 (0.073)	-0.015 (0.025)	0.1173** (0.048)	0.123 (0.090)
Average standardized effect educ.	0.018 (0.035)	0.1370* (0.073)	-0.022 (0.086)	0.021 (0.033)	0.1181* (0.067)	-0.054 (0.078)	-0.003 (0.033)	0.019 (0.067)	0.032 (0.083)

Pooled

Indicator	AVERAGE								
	Java Incentive Treatment Effect	Additional NTT Incentive Treatment Effect	Additional Sulawesi Incentive Treatment Effect	Java Non-Incentive Treatment Effect	Additional NTT Non-Incentive Treatment Effect	Additional Sulawesi Non-Incentive Treatment Effect	Java Incentive Additional Effect	Additional NTT Incentive Additional Effect	Additional Sulawesi Incentive Additional Effect
<i>Main 12 indicators</i>									
Number prenatal visits	0.296 (0.179)	-0.423 (0.360)	0.234 (0.537)	0.034 (0.162)	-0.6673* (0.362)	-0.146 (0.435)	0.262 (0.167)	0.245 (0.321)	0.380 (0.615)
Delivery by trained midwife	0.021 (0.020)	-0.033 (0.055)	0.059 (0.044)	0.0472** (0.019)	-0.1359** (0.057)	-0.016 (0.048)	-0.026 (0.018)	0.1026** (0.049)	0.075 (0.053)
Number of postnatal visits	-0.2928** (0.128)	0.4672** (0.213)	0.5560** (0.267)	-0.055 (0.128)	-0.149 (0.196)	0.260 (0.216)	-0.2380* (0.132)	0.6164*** (0.207)	0.296 (0.290)
Iron tablet sachets	0.095 (0.069)	0.013 (0.113)	0.050 (0.135)	0.1240* (0.070)	-0.156 (0.116)	-0.2756** (0.123)	-0.029 (0.069)	0.1681* (0.101)	0.3259** (0.135)
Percent of immunization	-0.006 (0.013)	0.0598** (0.029)	0.0826* (0.048)	-0.010 (0.013)	0.031 (0.028)	0.031 (0.041)	0.004 (0.013)	0.028 (0.026)	0.052 (0.043)
Number of weight checks	0.1121** (0.048)	0.087 (0.089)	0.2648* (0.152)	0.1168** (0.049)	0.049 (0.093)	0.056 (0.117)	-0.005 (0.047)	0.038 (0.091)	0.209 (0.163)
Number Vitamin A supplements	0.067 (0.042)	-0.1574* (0.092)	0.034 (0.100)	0.033 (0.053)	-0.1639* (0.099)	0.020 (0.100)	0.033 (0.051)	0.007 (0.079)	0.014 (0.124)
Percent malnourished	0.006 (0.012)	-0.0723** (0.029)	-0.037 (0.036)	-0.002 (0.013)	-0.042 (0.027)	0.020 (0.034)	0.008 (0.015)	-0.030 (0.031)	-0.057 (0.040)
Age 7–12 gross enrollment	-0.005 (0.004)	0.0275*** (0.008)	-0.001 (0.015)	-0.001 (0.004)	0.0287*** (0.009)	0.002 (0.013)	-0.004 (0.004)	-0.001 (0.009)	-0.003 (0.017)
Age 13–15 gross enrollment	-0.004 (0.017)	-0.009 (0.037)	0.026 (0.040)	0.005 (0.020)	-0.022 (0.036)	-0.1014*** (0.037)	-0.009 (0.018)	0.013 (0.032)	0.1273*** (0.035)
Age 7–12 gross attendance	-0.005 (0.005)	0.0322*** (0.010)	-0.016 (0.018)	-0.006 (0.005)	0.0305*** (0.010)	0.008 (0.014)	0.002 (0.005)	0.002 (0.011)	-0.024 (0.020)
Age 13–15 gross attendance	-0.004 (0.018)	-0.007 (0.038)	0.018 (0.042)	0.006 (0.021)	-0.035 (0.038)	-0.1140*** (0.038)	-0.009 (0.020)	0.029 (0.033)	0.1316*** (0.037)
Average standardized effect	0.010 (0.018)	0.052 (0.041)	0.0907* (0.050)	0.024 (0.018)	-0.032 (0.038)	-0.057 (0.047)	-0.014 (0.019)	0.0831** (0.035)	0.1478** (0.060)
Average standardized effect health	0.025 (0.020)	0.037 (0.044)	0.1316** (0.053)	0.0365* (0.021)	-0.071 (0.046)	-0.006 (0.054)	-0.012 (0.020)	0.1079*** (0.038)	0.1380** (0.070)
Average standardized effect educ.	-0.021 (0.031)	0.081 (0.066)	0.009 (0.074)	-0.002 (0.036)	0.048 (0.064)	-0.1584* (0.081)	-0.019 (0.034)	0.034 (0.057)	0.1673** (0.076)

**Appendix Table 4: Indicator-by-indicator results for heterogeneity corresponding to Table 4**

Wave II

Wave III

AVERAGE

Indicator	Generasi Incentive Total Effect * Pre-Period Level	Generasi Non-Incentive Total Effect * Pre-Period Level	Generasi Additional Effect * Pre-Period Level	Incentive Additional Effect at 10th Percentile	Generasi Incentive Total Effect * Pre-Period Level	Generasi Non-Incentive Total Effect * Pre-Period Level	Generasi Additional Effect * Pre-Period Level	Incentive Additional Effect at 10th Percentile	Generasi Incentive Total Effect * Pre-Period Level	Generasi Non-Incentive Total Effect * Pre-Period Level	Generasi Incentive Additional Effect * Pre-Period Level	Incentive Additional Effect at 10th Percentile
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Main 12 indicators</i>												
Number prenatal visits	0.167 (0.131)	0.115 (0.117)	0.052 (0.133)	0.490 (0.365)	-0.045 (0.080)	-0.1456* (0.082)	0.101 (0.083)	-0.095 (0.284)	0.065 (0.080)	-0.015 (0.071)	0.080 (0.082)	0.158 (0.253)
Delivery by trained midwife	-0.088 (0.074)	0.042 (0.070)	-0.1296* (0.071)	0.050 (0.046)	-0.056 (0.071)	0.049 (0.076)	-0.105 (0.068)	0.065 (0.042)	-0.074 (0.055)	0.040 (0.056)	-0.1143** (0.053)	0.0588* (0.034)
Number of postnatal visits	-0.141 (0.126)	-0.039 (0.130)	-0.102 (0.142)	0.012 (0.193)	-0.2502* (0.137)	-0.061 (0.128)	-0.189 (0.136)	0.221 (0.182)	-0.1904** (0.094)	-0.043 (0.101)	-0.147 (0.103)	0.123 (0.142)
Iron tablet sachets	-0.142 (0.126)	-0.206 (0.130)	0.064 (0.152)	0.044 (0.111)	0.009 (0.124)	0.160 (0.143)	-0.151 (0.153)	0.116 (0.097)	-0.082 (0.093)	-0.020 (0.093)	-0.061 (0.111)	0.086 (0.074)
Percent of immunization	-0.1884** (0.085)	-0.086 (0.078)	-0.102 (0.087)	0.041 (0.029)	0.016 (0.079)	0.074 (0.073)	-0.057 (0.066)	0.033 (0.025)	-0.102 (0.062)	-0.021 (0.057)	-0.080 (0.056)	0.0376* (0.020)
Number of weight checks	-0.071 (0.098)	-0.086 (0.099)	0.016 (0.106)	0.083 (0.108)	-0.065 (0.110)	0.000 (0.115)	-0.065 (0.129)	0.022 (0.120)	-0.069 (0.069)	-0.043 (0.086)	-0.025 (0.094)	0.045 (0.093)
Number Vitamin A supplements	-0.030 (0.128)	-0.024 (0.115)	-0.007 (0.154)	-0.008 (0.096)	-0.001 (0.115)	-0.044 (0.130)	0.043 (0.133)	0.060 (0.085)	-0.013 (0.085)	-0.037 (0.093)	0.024 (0.106)	0.026 (0.065)
Percent malnourished	-0.2564** (0.129)	-0.100 (0.113)	-0.156 (0.138)	-0.0481* (0.027)	-0.2677** (0.132)	-0.2400** (0.116)	-0.028 (0.128)	0.006 (0.027)	-0.2591*** (0.095)	-0.1657** (0.078)	-0.093 (0.100)	-0.020 (0.021)
Age 7–12 gross enrollment	-0.042 (0.090)	-0.087 (0.106)	0.045 (0.127)	-0.007 (0.012)	-0.114 (0.094)	-0.1800** (0.081)	0.066 (0.098)	-0.011 (0.010)	-0.074 (0.066)	-0.129 (0.080)	0.055 (0.091)	-0.009 (0.009)
Age 13–15 gross enrollment	-0.063 (0.120)	-0.079 (0.121)	0.016 (0.149)	0.013 (0.044)	-0.006 (0.109)	-0.115 (0.098)	0.110 (0.101)	-0.021 (0.028)	-0.036 (0.085)	-0.100 (0.090)	0.065 (0.098)	-0.006 (0.028)
Age 7–12 gross attendance	-0.051 (0.039)	-0.045 (0.039)	-0.006 (0.033)	0.000 (0.006)	-0.1064** (0.050)	-0.1085** (0.049)	0.002 (0.034)	-0.001 (0.007)	-0.0738** (0.032)	-0.0721** (0.031)	-0.002 (0.027)	-0.001 (0.005)
Age 13–15 gross attendance	-0.052 (0.111)	-0.033 (0.109)	-0.019 (0.133)	0.031 (0.048)	-0.022 (0.108)	-0.110 (0.078)	0.087 (0.099)	-0.016 (0.032)	-0.037 (0.080)	-0.077 (0.073)	0.040 (0.087)	0.004 (0.029)

Notes: See Notes to Table 3. Data is from the household survey. Columns (1), (5), and (9) interact the incentive treatment dummy with the baseline subdistrict mean of the variable shown, and columns (2), (5), and (10) interact the non-incentive treatment dummy with the baseline subdistrict mean of the variable shown. Columns (3), (7), and (11) are the difference between the two previous columns. Columns (4), (8), and (12) show the estimated additional impact of incentives evaluated at the 10<sup>th</sup> percentile of the indicator at baseline. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect (columns 3, 7, and 11) none of the coefficients are rejected taking into account multiple comparisons.

**Appendix Table 5: Detail on spillovers to non-targeted indicators.**

Indicator	Wave II			Wave III			AVERAGE			
	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect	
<i>Health utilization</i>										
Facility-based vs home Deliveries	0.397 [0.490]	0.041 (0.025)	0.018 (0.023)	0.023 (0.026)	0.030 (0.025)	0.0431* (0.024)	-0.013 (0.026)	0.0347* (0.020)	0.0326* (0.020)	0.002 (0.022)
Use of family planning	0.528 [0.499]	0.008 (0.016)	-0.007 (0.015)	0.016 (0.014)	-0.022 (0.014)	-0.0246* (0.013)	0.003 (0.013)	-0.008 (0.012)	-0.017 (0.010)	0.008 (0.010)
Use of health services curative care	.	-0.009 [.]	-0.001 (0.019)	-0.008 (0.018)	-0.007 (0.021)	-0.005 (0.020)	-0.002 (0.020)	-0.008 (0.014)	-0.003 (0.014)	-0.004 (0.014)
Any prenatal visits beyond 4	0.737 [0.440]	0.022 (0.022)	-0.0342* (0.021)	0.0558** (0.022)	0.0340* (0.019)	0.015 (0.020)	0.019 (0.018)	0.0272* (0.015)	-0.008 (0.015)	0.0351** (0.015)
Any vitamin A beyond 2	0.043 [0.204]	-0.008 (0.011)	0.002 (0.011)	-0.010 (0.011)	0.016 (0.011)	-0.001 (0.010)	0.017 (0.010)	0.004 (0.008)	0.000 (0.007)	0.004 (0.008)
Average standardized effect		0.019 (0.020)	-0.010 (0.021)	0.029 (0.022)	0.029 (0.021)	0.011 (0.020)	0.018 (0.019)	0.023 (0.016)	0.001 (0.015)	0.022 (0.016)
<i>Health quality</i>										
Quality of prenatal care services	0.546 [0.244]	0.019 (0.012)	0.002 (0.013)	0.017 (0.013)	0.016 (0.013)	0.008 (0.012)	0.007 (0.012)	0.0171* (0.010)	0.006 (0.010)	0.012 (0.009)
Quality of posyandu	.	0.0489* [.]	0.0669*** (0.025)	-0.018 (0.027)	0.009 (0.022)	0.022 (0.024)	-0.013 (0.025)	0.0287* (0.017)	0.0434** (0.018)	-0.015 (0.019)
Average standardized effect		0.0901** (0.039)	0.0752* (0.039)	0.015 (0.040)	0.041 (0.036)	0.040 (0.038)	0.001 (0.036)	0.0646** (0.029)	0.0567** (0.029)	0.008 (0.028)
<i>Maternal knowledge and practices</i>										
Initiation of breastfeeding	0.575 [0.494]	0.023 (0.023)	0.008 (0.022)	0.015 (0.023)	0.031 (0.022)	0.022 (0.020)	0.009 (0.020)	0.027 (0.017)	0.016 (0.016)	0.012 (0.017)
Exclusive breastfeeding	0.472 [0.499]	0.014 (0.024)	0.023 (0.026)	-0.008 (0.026)	-0.009 (0.022)	0.008 (0.023)	-0.017 (0.022)	0.002 (0.017)	0.015 (0.018)	-0.013 (0.018)
Mother's knowledge	.	0.004 [.]	0.009 (0.009)	-0.005 (0.010)	0.013 (0.008)	0.0206*** (0.007)	-0.008 (0.008)	0.008 (0.006)	0.0151** (0.006)	-0.007 (0.006)
Woman role in child decisions dummy	0.773 [0.419]	0.003 (0.019)	-0.005 (0.017)	0.008 (0.018)	0.006 (0.017)	-0.002 (0.017)	0.008 (0.016)	0.004 (0.013)	-0.003 (0.013)	0.008 (0.013)
Average standardized effect		0.026 (0.029)	0.024 (0.028)	0.002 (0.030)	0.033 (0.029)	0.043 (0.027)	-0.011 (0.026)	0.029 (0.022)	0.034 (0.022)	-0.005 (0.021)
<i>Family composition decisions</i>										
Fertility rate	0.344 [0.475]	-0.001 (0.012)	-0.018 (0.012)	0.016 (0.012)	0.011 (0.010)	0.002 (0.010)	0.009 (0.009)	0.005 (0.008)	-0.006 (0.008)	0.012 (0.007)

Indicator	Wave II			Wave III			AVERAGE			
		Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
Number migrate out village 12 mons	.				-1.642 (1.509)	1.261 (1.812)	-2.9026* (1.637)	-1.642 (1.509)	1.261 (1.812)	-2.9026* (1.637)
Number HH indivs. Migrate out kec 12 mons	0.069 [0.314]	-0.014 (0.011)	-0.008 (0.013)	-0.006 (0.013)	0.008 (0.013)	-0.009 (0.013)	0.017 (0.011)	-0.001 (0.009)	-0.009 (0.010)	0.008 (0.009)
Average standardized effect		0.014 (0.019)	-0.012 (0.021)	0.026 (0.022)	0.023 (0.022)	-0.007 (0.026)	0.029 (0.023)	0.025 (0.020)	-0.014 (0.024)	0.0381* (0.022)
<i>Other education metrics</i>										
Gross high school enrollment	.	-0.032 (0.044)	-0.022 (0.043)	-0.011 (0.045)	-0.0669** (0.034)	-0.010 (0.033)	-0.0572* (0.034)	-0.052 (0.032)	-0.014 (0.031)	-0.038 (0.034)
Dropout rates	0.026 [0.158]	0.007 (0.004)	0.007 (0.005)	-0.001 (0.005)	0.000 (0.003)	-0.002 (0.003)	0.002 (0.003)	0.003 (0.003)	0.002 (0.003)	0.001 (0.003)
SD to SMP transition	0.885 [0.319]	-0.009 (0.014)	0.000 (0.010)	-0.008 (0.013)	0.010 (0.020)	0.016 (0.018)	-0.006 (0.015)	0.001 (0.012)	0.009 (0.011)	-0.007 (0.011)
Number of hours attended school	17.112 [13.674]	-0.6103* (0.343)	-0.8002* (0.415)	0.190 (0.441)	-0.147 (0.475)	0.123 (0.432)	-0.270 (0.434)	-0.369 (0.329)	-0.279 (0.330)	-0.090 (0.345)
Numbers attend Paket A					0.000 (0.001)	-0.0008* (0.000)	0.001 (0.000)	0.000 (0.001)	-0.0008* (0.000)	0.001 (0.000)
Numbers attend Paket B					0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
Numbers attend Paket C					0.001 (0.001)	-0.0009* (0.001)	0.0014** (0.001)	0.001 (0.001)	-0.0009* (0.001)	0.0014** (0.001)
Average standardized effect		-0.070 (0.049)	-0.051 (0.046)	-0.019 (0.049)	-0.013 (0.021)	0.006 (0.020)	-0.019 (0.018)	-0.022 (0.017)	-0.011 (0.018)	-0.012 (0.018)
<i>Distance to school</i>										
Distance to SMP (km)	11.439 [20.544]	-0.102 (0.214)	0.016 (0.243)	-0.118 (0.226)	0.076 (0.203)	0.005 (0.198)	0.071 (0.196)	0.001 (0.165)	0.003 (0.169)	-0.003 (0.166)
Time spent oneway to SMP (hr)	0.397 [0.350]	0.0501** (0.024)	0.024 (0.022)	0.026 (0.031)	-0.008 (0.020)	-0.001 (0.020)	-0.007 (0.021)	0.017 (0.018)	0.011 (0.016)	0.006 (0.020)
Transportation cost oneway to SMP	777.527 [1421.307]	144.559 (140.376)	25.835 (116.831)	118.724 (139.557)	-35.299 (153.749)	-180.402 (150.412)	145.103 (122.304)	45.869 (107.377)	-92.027 (104.765)	137.897 (101.851)
Average standardized effect		-0.077 (0.058)	-0.034 (0.050)	-0.043 (0.060)	0.004 (0.042)	0.022 (0.041)	-0.018 (0.042)	-0.025 (0.036)	0.002 (0.035)	-0.027 (0.039)
<i>Child labor (note these are</i>										

Indicator	Wave II			Wave III			AVERAGE			
		Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
bad so avg std effect * -1)										
Age 7-15 hours wage Work	0.431 [3.869]	-0.003 (0.078)	0.3647** (0.143)	-0.3672*** (0.125)	0.023 (0.076)	-0.012 (0.072)	0.035 (0.066)	0.018 (0.055)	0.1459** (0.073)	-0.1275** (0.064)
Age 7-15 hours household work	3.915 [6.761]	0.4178* (0.227)	0.9241*** (0.291)	-0.5063* (0.288)	-0.161 (0.212)	-0.150 (0.189)	-0.012 (0.196)	0.114 (0.155)	0.3196* (0.173)	-0.206 (0.173)
Age 7-15 wage work dummy	0.031 [0.174]	-0.001 (0.005)	0.0126* (0.007)	-0.0132** (0.006)	0.003 (0.006)	-0.002 (0.005)	0.005 (0.005)	0.001 (0.005)	0.004 (0.004)	-0.003 (0.004)
Age 7-15 household work Dummy	0.728 [0.445]	0.013 (0.016)	0.002 (0.017)	0.011 (0.018)	-0.022 (0.020)	0.006 (0.019)	-0.029 (0.022)	-0.007 (0.014)	0.006 (0.014)	-0.012 (0.016)
Average standardized effect		-0.025 (0.022)	-0.1074*** (0.038)	0.0825** (0.034)	0.012 (0.025)	0.007 (0.020)	0.005 (0.022)	-0.006 (0.018)	-0.0391* (0.021)	0.0335* (0.020)
Average standardized effect		-0.003 (0.016)	-0.017 (0.017)	0.013 (0.019)	0.012 (0.025)	0.007 (0.020)	0.005 (0.022)	0.013 (0.010)	0.004 (0.011)	0.008 (0.011)
Average standardized effect health		0.0373** (0.016)	0.019 (0.016)	0.018 (0.017)	0.012 (0.025)	0.007 (0.020)	0.005 (0.022)	0.0354*** (0.013)	0.020 (0.013)	0.016 (0.013)
Average standardized effect educ.		-0.0574** (0.029)	-0.0643** (0.030)	0.007 (0.032)	0.012 (0.025)	0.007 (0.020)	0.005 (0.022)	-0.018 (0.016)	-0.016 (0.016)	-0.002 (0.017)

Notes: See Notes to Table 11.

**Appendix Table 6: Changes over time**

Indicator	Wave II			Wave III			Wave III – Wave II		
	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Main 12 indicators</i>									
Number prenatal visits	0.300 (0.239)	-0.3559* (0.212)	0.6556*** (0.217)	0.165 (0.209)	-0.115 (0.215)	0.280 (0.211)	-0.135 (0.268)	0.241 (0.265)	-0.376 (0.267)
Delivery by trained midwife	0.022 (0.028)	0.025 (0.027)	-0.003 (0.025)	0.023 (0.025)	0.001 (0.027)	0.022 (0.027)	0.001 (0.030)	-0.024 (0.030)	0.025 (0.031)
Number of postnatal visits	-0.133 (0.143)	-0.035 (0.128)	-0.098 (0.139)	0.034 (0.141)	0.006 (0.133)	0.028 (0.157)	0.166 (0.173)	0.041 (0.173)	0.126 (0.175)
Iron tablet sachets	0.140 (0.086)	0.064 (0.083)	0.076 (0.081)	0.1356** (0.062)	0.094 (0.073)	0.042 (0.073)	-0.005 (0.088)	0.030 (0.088)	-0.035 (0.089)
Percent of immunization	0.028 (0.019)	0.012 (0.018)	0.016 (0.018)	0.017 (0.016)	-0.009 (0.017)	0.025 (0.016)	-0.011 (0.021)	-0.021 (0.021)	0.010 (0.021)
Number of weight checks	0.1533*** (0.053)	0.058 (0.050)	0.0952* (0.054)	0.1717*** (0.060)	0.2270*** (0.060)	-0.055 (0.056)	0.018 (0.064)	0.1689*** (0.063)	-0.1505** (0.063)
Number Vitamin A supplements	-0.026 (0.055)	-0.012 (0.055)	-0.014 (0.058)	0.088 (0.054)	0.028 (0.065)	0.060 (0.064)	0.114 (0.076)	0.040 (0.079)	0.074 (0.081)
Percent malnourished	-0.010 (0.017)	0.017 (0.015)	-0.0263* (0.016)	-0.0374** (0.016)	-0.0358** (0.017)	-0.002 (0.019)	-0.028 (0.024)	-0.0525** (0.024)	0.025 (0.025)
Age 7–12 participation rate	-0.001 (0.005)	0.003 (0.006)	-0.004 (0.006)	0.0088* (0.005)	0.0192*** (0.004)	-0.0104** (0.005)	0.010 (0.008)	0.0162** (0.008)	-0.006 (0.007)
Age 13–15 participation rate	-0.0376* (0.019)	-0.0535** (0.022)	0.016 (0.024)	0.024 (0.018)	0.017 (0.019)	0.007 (0.016)	0.0616** (0.026)	0.0707** (0.028)	-0.009 (0.028)
Age 7–12 gross attendance	-0.001 (0.006)	0.000 (0.006)	-0.001 (0.006)	0.005 (0.008)	0.008 (0.007)	-0.003 (0.008)	0.006 (0.009)	0.008 (0.010)	-0.002 (0.009)
Age 13–15 gross attendance	-0.0443** (0.020)	-0.0680*** (0.023)	0.024 (0.024)	0.0359* (0.019)	0.022 (0.020)	0.014 (0.017)	0.0803*** (0.027)	0.0902*** (0.029)	-0.010 (0.029)
Average standardized effect	0.007 (0.023)	-0.030 (0.021)	0.036 (0.023)	0.0716*** (0.021)	0.0515** (0.021)	0.020 (0.021)	0.0647** (0.027)	0.0809*** (0.023)	-0.016 (0.027)
Average standardized effect health	0.0468* (0.025)	0.004 (0.024)	0.0426* (0.024)	0.0734*** (0.024)	0.040 (0.025)	0.033 (0.025)	0.029 (0.030)	0.038 (0.028)	-0.009 (0.029)
Average standardized effect educ.	-0.0736** (0.037)	-0.0976** (0.043)	0.024 (0.044)	0.0679** (0.031)	0.0737** (0.034)	-0.006 (0.030)	0.1385* (0.075)	0.1678*** (0.035)	-0.031 (0.045)

Notes: See Notes to Table 3. This table restricts analysis to those kecamatans that, according to the randomization, had the same status in both year 1 and year 2. Columns (8) – (10) report the difference between impacts in Wave III and Wave II.

**Appendix Table 7: Interactions with Village Size**

Indicator	Wave II				Wave III			AVERAGE		
	Baseline Mean	Generasi Incentive * Village Population	Generasi Non-Incentive * Village Population	Generasi Incentive Additional Effect * Village Population	Generasi Incentive * Village Population	Generasi Non-Incentive * Village Population	Generasi Incentive Additional Effect * Village Population	Generasi Incentive * Village Population	Generasi Non-Incentive * Village Population	Generasi Incentive Additional Effect * Village Population
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number prenatal visits	7.444 [4.3634]	0.186 (0.134)	0.202 (0.128)	-0.016 (0.140)	-0.067 (0.143)	0.137 (0.147)	-0.204 (0.155)	0.083 (0.098)	0.1920** (0.096)	-0.109 (0.103)
Delivery by trained midwife	0.666 [0.4716]	0.0255* (0.015)	0.010 (0.014)	0.015 (0.015)	-0.015 (0.017)	-0.002 (0.017)	-0.014 (0.018)	0.005 (0.011)	0.006 (0.011)	-0.001 (0.012)
Number of postnatal visits	1.731 [2.4677]	0.036 (0.088)	0.024 (0.084)	0.011 (0.092)	-0.033 (0.098)	0.2288** (0.098)	-0.2620** (0.105)	-0.009 (0.065)	0.101 (0.063)	-0.109 (0.068)
Iron tablet sachets	1.589 [1.2581]	-0.035 (0.046)	-0.031 (0.044)	-0.005 (0.048)	0.033 (0.046)	0.073 (0.049)	-0.040 (0.052)	-0.004 (0.033)	0.010 (0.033)	-0.014 (0.035)
Percent of immunization	0.655 [0.3653]	-0.003 (0.011)	0.006 (0.010)	-0.009 (0.011)	0.016 (0.010)	0.0216** (0.011)	-0.005 (0.011)	0.004 (0.008)	0.0133* (0.008)	-0.009 (0.008)
Number of weight checks	2.145 [1.1772]	0.029 (0.031)	0.037 (0.029)	-0.007 (0.032)	0.030 (0.033)	0.0701** (0.031)	-0.041 (0.034)	0.024 (0.023)	0.0479** (0.021)	-0.024 (0.023)
Number Vitamin A supplements	1.522 [1.1460]	0.004 (0.037)	-0.001 (0.034)	0.005 (0.037)	0.021 (0.044)	-0.047 (0.044)	0.067 (0.048)	0.022 (0.028)	-0.021 (0.027)	0.043 (0.029)
Percent malnourished	0.177 [0.3813]	-0.0229* (0.012)	-0.012 (0.011)	-0.011 (0.012)	-0.019 (0.013)	0.013 (0.012)	-0.0311** (0.013)	-0.0212** (0.009)	-0.001 (0.008)	-0.0202** (0.009)
Age 7–12 participation rate	0.949 [0.2211]	0.003 (0.004)	0.001 (0.004)	0.003 (0.004)	0.0068* (0.004)	0.005 (0.004)	0.002 (0.004)	0.0052* (0.003)	0.003 (0.003)	0.002 (0.003)
Age 13–15 participation rate	0.817 [0.3865]	-0.010 (0.016)	-0.006 (0.015)	-0.004 (0.016)	-0.006 (0.014)	-0.018 (0.012)	0.012 (0.013)	-0.005 (0.010)	-0.010 (0.009)	0.006 (0.010)
Age 7–12 gross attendance	0.906 [0.2758]	0.001 (0.005)	0.000 (0.005)	0.002 (0.005)	-0.002 (0.005)	0.003 (0.004)	-0.005 (0.005)	0.000 (0.004)	0.001 (0.003)	-0.001 (0.003)
Age 13–15 gross attendance	0.759 [0.4184]	-0.003 (0.017)	0.000 (0.015)	-0.003 (0.016)	-0.006 (0.014)	-0.014 (0.012)	0.008 (0.014)	-0.002 (0.011)	-0.006 (0.009)	0.004 (0.010)
Average standardized effect		0.013 (0.014)	0.010 (0.013)	0.003 (0.016)	0.009 (0.014)	0.016 (0.013)	-0.007 (0.016)	0.012 (0.010)	0.012 (0.011)	0.000 (0.012)
Average standardized effect health		0.021 (0.015)	0.017 (0.015)	0.004 (0.017)	0.013 (0.015)	0.0297* (0.018)	-0.016 (0.018)	0.016 (0.012)	0.021 (0.014)	-0.005 (0.014)
Average standardized effect educ.		-0.003 (0.031)	-0.004 (0.023)	0.001 (0.031)	0.000 (0.025)	-0.012 (0.017)	0.012 (0.022)	0.004 (0.018)	-0.006 (0.015)	0.010 (0.018)

Notes: This table shows the interaction of the Generasi variables with village population, as measured at baseline.

**Appendix Table 8: Midwife Behavior Heterogeneity by Civil Servant Status**

Indicator	Wave II			Wave III			AVERAGE		
	Incentive Treatment Effect * PNS	Non-Incentive Treatment Effect * PNS	Incentive Additional Effect * PNS	Incentive Treatment Effect * PNS	Non-Incentive Treatment Effect * PNS	Incentive Additional Effect * PNS	Incentive Average Treatment Effect * PNS	Non-Incentive Average Treatment Effect * PNS	Incentive Average Additional Effect * PNS
<i>Midwives:</i>									
Hours spent in outreach over past 3 Days	-0.722 (0.876)	-0.359 (0.906)	-0.363 (1.038)	-1.000 (1.056)	0.458 (1.001)	-1.457 (0.920)	-0.798 (0.717)	0.228 (0.618)	-1.026 (0.667)
Hours spent providing public services over past 3 days	2.216 (1.727)	0.535 (1.872)	1.680 (1.964)	2.309 (1.796)	-0.195 (1.896)	2.504 (1.932)	2.3145* (1.298)	0.135 (1.481)	2.179 (1.511)
Hours spent providing private services over past 3 days	0.480 (2.508)	0.589 (3.244)	-0.109 (3.475)	2.911 (1.986)	-2.275 (2.461)	5.1860** (2.184)	2.018 (1.599)	-0.920 (2.147)	2.937 (2.105)
Total hours spent working over past 3 Days	2.165 (3.066)	1.059 (3.812)	1.106 (4.144)	4.248 (2.984)	-1.895 (3.316)	6.1424* (3.268)	3.6568* (2.037)	-0.342 (2.731)	3.999 (2.870)
Number of posyandus attended in past Month	0.135 (0.685)	-0.438 (0.762)	0.573 (0.828)	-0.088 (0.713)	-0.370 (0.687)	0.283 (0.838)	-0.018 (0.551)	-0.435 (0.642)	0.417 (0.713)
Number of hours midwife per posyandu	-0.036 (0.282)	0.354 (0.307)	-0.390 (0.340)	-0.057 (0.445)	-0.440 (0.416)	0.383 (0.395)	0.053 (0.265)	0.003 (0.268)	0.050 (0.289)
Average standardized effect health	0.059 (0.114)	0.032 (0.138)	0.027 (0.147)	0.132 (0.137)	-0.114 (0.138)	0.2453* (0.139)	0.112 (0.084)	-0.032 (0.106)	0.144 (0.111)

Notes: See Notes to Table 8. This table interacts the midwife effort variables in Table 8 with a dummy variable, PNS, that captures whether the midwife is a regular (effectively tenured) civil servant (*Pegawai Negeri Sipil*), or PNS.

**Appendix Table 9: Comparing Administrative to Household Survey Data, Indicator by indicator**

Indicator	Wave II	Wave III	Pooled
	Incentive Additional Effect – difference	Incentive Additional Effect – difference	Incentive Additional Effect – difference
	(1)	(2)	(3)
Number prenatal visits	-0.8528** (0.362)	-0.282 (0.399)	-0.5709** (0.286)
Delivery by trained midwife	-0.037 (0.084)	-0.076 (0.060)	-0.057 (0.050)
Number of postnatal visits	0.010 (0.179)	-0.147 (0.205)	-0.069 (0.142)
Iron tablet sachets	-0.120 (0.233)	-0.300 (0.416)	-0.209 (0.254)
Percent of immunization	-0.4820* (0.262)	-0.058 (0.261)	-0.268 (0.178)
Number of weight checks	-0.117 (0.277)	-0.172 (0.126)	-0.144 (0.150)
Number Vitamin A Supplements	-0.663 (0.538)	-0.204 (0.525)	-0.432 (0.380)
Age 7–12 participation rate	-1.504 (1.004)	-0.018 (0.100)	-0.728 (0.484)
Age 13–15 participation rate	-1.706 (1.169)	-0.1626** (0.078)	-0.842 (0.516)
Age 7–12 gross attendance	-1.164 (0.722)	-0.011 (0.617)	-0.564 (0.462)
Age 13–15 gross attendance	-1.3562** (0.618)	-1.706 (1.073)	-1.5518** (0.654)

Notes: This table reports the difference between MIS data and corresponding household indicators. These are the individual indicators corresponding to Panel C of Table 12. Robust standard errors in parentheses, adjusted for clustering at the subdistrict level.

**Appendix Table 10: Within-subdistrict targeting of direct benefits, detailed results by indicator**

Indicator	Wave II				Wave III			AVERAGE		
	Baseline Mean	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Additional effect Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Additional effect Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Additional effect Top 3 Quintiles Additional Effect
Received scholarship	0.025 [0.0048]	-0.018 (0.014)	0.015 (0.014)	-0.0322** (0.016)	-0.019 (0.018)	-0.011 (0.018)	-0.007 (0.018)	-0.018 (0.011)	-0.002 (0.011)	-0.017 (0.012)
Received uniform	0.013 [0.0036]	-0.020 (0.017)	-0.007 (0.017)	-0.013 (0.020)	-0.026 (0.020)	-0.017 (0.020)	-0.010 (0.019)	-0.021 (0.013)	-0.010 (0.013)	-0.011 (0.014)
Received other school Supplies	0.008 [0.0027]	0.007 (0.016)	-0.0292* (0.016)	0.0365** (0.018)	-0.0420** (0.018)	-0.003 (0.018)	-0.0393** (0.017)	-0.019 (0.012)	-0.010 (0.012)	-0.009 (0.013)
Received transport Subsidy	0.000 [0.0000]	0.006 (0.005)	0.002 (0.006)	0.003 (0.006)	0.003 (0.005)	-0.002 (0.005)	0.005 (0.005)	0.004 (0.004)	0.000 (0.004)	0.004 (0.004)
Received other school Support	0.000 [0.0000]				-0.011 (0.008)	-0.011 (0.008)	0.000 (0.008)	-0.005 (0.004)	-0.005 (0.004)	0.000 (0.004)
Received supp. feeding at School	0.000 [0.0000]	0.000 (0.004)	0.0083** (0.004)	-0.0084* (0.005)	-0.0130** (0.006)	-0.007 (0.006)	-0.006 (0.006)	-0.0069** (0.004)	0.000 (0.004)	-0.0065* (0.004)
Received supp. feeding at posyandu	0.469 [0.0171]	-0.0949** (0.047)	-0.001 (0.048)	-0.0939* (0.056)	-0.040 (0.045)	-0.049 (0.044)	0.009 (0.044)	-0.0585* (0.032)	-0.029 (0.031)	-0.030 (0.035)
Received intensive supp. feeding at school	0.027 [0.0055]	0.010 (0.024)	0.003 (0.024)	0.007 (0.028)	-0.0518** (0.024)	-0.0450* (0.024)	-0.007 (0.024)	-0.022 (0.017)	-0.022 (0.016)	-0.001 (0.018)
Received health subsidy for pre/postnatal care	0.005 [0.0023]	0.010 (0.020)	-0.025 (0.021)	0.036 (0.024)	0.027 (0.036)	-0.032 (0.035)	0.0585* (0.035)	0.010 (0.018)	-0.0370** (0.018)	0.0472** (0.020)
Received health subsidy for childbirth	0.039 [0.0078]	-0.049 (0.063)	0.095 (0.063)	-0.1437* (0.074)	0.001 (0.090)	0.075 (0.084)	-0.075 (0.084)	-0.028 (0.051)	0.0847* (0.049)	-0.1130** (0.055)

Notes: See Notes to Table 10.

**Appendix Table 11: Within-subdistrict targeting of impacts on main indicators, detailed results by indicator**

Indicator	Wave II			Wave III			AVERAGE			
	Baseline Mean	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Additional effect Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Additional effect Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Additional effect Top 3 Quintiles Additional Effect
<i>Main 12 indicators</i>										
Number prenatal visits	7.447 [4.2935]	-1.7556** (0.811)	-0.704 (0.802)	-1.052 (0.939)	1.9985** (0.996)	1.024 (0.949)	0.975 (0.938)	-0.321 (0.619)	-0.247 (0.598)	-0.074 (0.665)
Delivery by trained midwife	0.670 [0.4705]	-0.021 (0.093)	0.082 (0.093)	-0.104 (0.109)	0.172 (0.137)	-0.045 (0.130)	0.2161* (0.126)	0.055 (0.076)	0.012 (0.073)	0.044 (0.082)
Number of postnatal visits	1.720 [2.4477]	0.353 (0.529)	0.108 (0.531)	0.245 (0.621)	1.5457** (0.690)	0.588 (0.659)	0.958 (0.637)	0.8002* (0.412)	0.258 (0.400)	0.542 (0.447)
Iron tablet sachets	1.588 [1.2554]	-0.047 (0.279)	-0.045 (0.278)	-0.002 (0.325)	0.171 (0.308)	0.004 (0.298)	0.167 (0.294)	0.046 (0.204)	-0.035 (0.199)	0.081 (0.221)
Percent of immunization	0.653 [0.3664]	0.004 (0.053)	0.065 (0.055)	-0.061 (0.063)	-0.016 (0.079)	-0.034 (0.077)	0.018 (0.075)	-0.001 (0.044)	0.029 (0.044)	-0.030 (0.049)
Number of weight checks	2.126 [1.1895]	-0.169 (0.129)	-0.110 (0.130)	-0.058 (0.154)	-0.2847* (0.152)	-0.125 (0.146)	-0.160 (0.149)	-0.2069** (0.097)	-0.094 (0.094)	-0.113 (0.107)
Number Vitamin A Supplements	1.529 [1.1370]	0.143 (0.162)	0.079 (0.172)	0.064 (0.194)	-0.099 (0.314)	0.182 (0.309)	-0.280 (0.297)	0.121 (0.143)	0.171 (0.147)	-0.051 (0.162)
Percent malnourished	0.168 [0.3739]	0.1139** (0.051)	-0.1066** (0.052)	0.2205*** (0.061)	0.056 (0.064)	0.009 (0.062)	0.047 (0.064)	0.0768* (0.040)	-0.054 (0.039)	0.1309*** (0.044)
Age 7–12 gross enrollment	0.948 [0.2221]	-0.013 (0.016)	-0.014 (0.016)	0.001 (0.018)	-0.017 (0.016)	-0.010 (0.015)	-0.007 (0.015)	-0.015 (0.011)	-0.011 (0.011)	-0.004 (0.012)
Age 13–15 gross enrollment	0.822 [0.3827]	-0.024 (0.055)	-0.025 (0.056)	0.001 (0.065)	-0.020 (0.051)	0.0937* (0.051)	-0.1135** (0.051)	-0.034 (0.037)	0.036 (0.037)	-0.0696* (0.040)
Age 7–12 gross attendance	0.904 [0.2773]	-0.008 (0.018)	-0.015 (0.019)	0.007 (0.022)	-0.020 (0.019)	-0.023 (0.018)	0.002 (0.018)	-0.013 (0.013)	-0.017 (0.013)	0.004 (0.014)
Age 13–15 gross attendance	0.768 [0.4125]	-0.019 (0.056)	-0.032 (0.057)	0.013 (0.066)	-0.014 (0.053)	0.073 (0.053)	-0.0871* (0.052)	-0.027 (0.038)	0.021 (0.038)	-0.049 (0.041)
Average standardized effect		-0.075 (0.065)	0.007 (0.074)	-0.082 (0.085)	0.062 (0.075)	0.054 (0.066)	0.008 (0.068)	-0.017 (0.847)	0.031 (0.773)	-0.048 (0.922)
Average standardized effect Health		-0.078 (0.078)	0.057 (0.080)	-0.135 (0.092)	0.133 (0.097)	0.038 (0.087)	0.095 (0.091)	0.020 (0.731)	0.043 (0.632)	-0.024 (0.752)
Average standardized effect educ.		-0.068 (0.096)	-0.093 (0.129)	0.025 (0.143)	-0.078 (0.084)	0.087 (0.091)	-0.1651* (0.084)	-0.090 (1.234)	0.006 (1.193)	-0.097 (1.397)

Notes: See Notes to Table 10.

**Appendix Table 12: Cost-effectiveness Calculation**

	Generasi with Incentives	Generasi without Incentives	Additional effect of incentives	Conditional Cash Transfer (PKH) (no spillover)	Conditional Cash Transfer (PKH) (w. spillover)	Generasi with Incentives	Generasi without Incentives	Additional effect of incentives	Conditional Cash Transfer (PKH) (no spillover)	Conditional Cash Transfer (PKH) (w. spillover)
<i>Panel A: Social Cost Effectiveness</i>										
	Entire program									
Transfers	0.00	0.00	0.00	0.00	0.00					
Non-transfers	3.91	3.68	0.23	0.00	0.00					
Facilitation	2.54	2.54	0.00	18.40	18.40					
Marginal cost public funds	5.07	5.07	0.00	32.04	32.04					
Total costs (millions USD)	11.51	11.28	0.23	50.44	50.44					
Millions of points	1.42	1.04	0.373	2.24	4.46					
Dollars per point	8.13	10.81	0.62	22.43	11.30					
<i>Panel B: Social Cost Effectiveness by Area</i>										
	Health					Education				
Transfers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-transfers	2.24	1.97	0.28	0.00	0.00	1.63	1.68	-0.05	0.00	0.00
Facilitation	1.27	1.27	0.00	21.72	21.72	1.27	1.27	0.00	21.72	21.72
Marginal cost public funds	2.87	2.77	0.10	16.02	16.02	2.95	3.05	-0.10	16.02	16.02
Total costs (millions USD)	6.39	6.01	0.38	37.74	37.74	5.85	6.00	-0.15	37.74	37.74
Millions of points	0.96	0.67	0.291	2.25	4.47	0.46	0.38	0.081	0.00	0.00
Dollars per point	6.66	9.01	1.30	16.78	8.45	12.78	15.93	N/A	N/A	N/A

Notes: Note that the costs and points for Generasi have been divided by 2, so that in this calculation exactly half the benefits and costs have been allocated to the program with and without incentives. The estimated points are therefore 50% of the estimated numbers in Table 3 above. PKH calculations are authors' calculations based on the coefficients given in Alatas et. al (2010), as well as authors' calculations of the average number of beneficiaries of different age ranges per PKH household based on the PKH wave 3 survey. For health and education, we allocate the facilitation costs and PKH transfers 50-50 between health and education, and allocate actual Generasi expenditures based on the actual distribution of expenditures between health and education in the MIS data.

**Appendix Table 13: Cost-effectiveness Calculation Counting All Dollars Spent Equally**

	Generasi with Incentives	Generasi without Incentives	Additional effect of incentives	Conditional Cash Transfer (PKH) (no spillover)	Conditional Cash Transfer (PKH) (w. spillover)	Generasi with Incentives	Generasi without Incentives	Additional effect of incentives	Conditional Cash Transfer (PKH) (no spillover)	Conditional Cash Transfer (PKH) (w. spillover)
	Entire program, not including transfers					Entire program, including transfers				
	0.00	0.00	0.00	0.00	0.00	10.46	10.69	-0.23	88.40	88.40
Non-transfers	3.91	3.68	0.23	0.00	0.00	3.91	3.68	0.23	0.00	0.00
Facilitation	2.54	2.54	0.00	18.40	18.40	2.54	2.54	0.00	18.40	18.40
Marginal cost of public funds	0.00	0.00	0.00			0.00	0.00	0.00		
Total costs (millions USD)	6.44	6.21	0.23	106.80	106.80	16.90	16.90	0.373	106.80	106.80
Millions of points	1.42	1.04	0.373	2.458	4.466	1.42	1.04	0.00	2.458	4.466
Dollars per point	4.55	5.95	0.62	7.49	4.12	11.93	16.20	0.00	43.45	23.92

Notes: See Notes to Table 10.

**Appendix Table 14: Additional results on mortality, gestational age, and prenatal experiences**

Indicator	Wave II				Wave III			AVERAGE		
	Baseline Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Gestational age at birth (weeks)	36.0525 [0.0819]	0.1227 (0.2950)	0.0988 (0.3488)	0.0239 (0.3235)	-0.0657 (0.2411)	0.3568 (0.2221)	-0.4224* (0.2296)	0.0194 (0.1823)	0.2474 (0.1946)	-0.228 (0.1926)
Born < 36 weeks	0.0832 [0.0052]	-0.0148 (0.0118)	0.0058 (0.0121)	-0.0207 (0.0137)	0.0194 (0.0136)	-0.0018 (0.0118)	0.0211* (0.0123)	0.0032 (0.0096)	0.0006 (0.0090)	0.0027 (0.0094)
Born < 37 weeks	0.5831 [0.0092]	0.0116 (0.0245)	0.0212 (0.0248)	-0.0097 (0.0265)	0.0348 (0.0264)	0.0042 (0.0246)	0.0305 (0.0238)	0.0239 (0.0173)	0.011 (0.0181)	0.0129 (0.0167)
Born < 38 weeks	0.72 [0.0084]	-0.0016 (0.0249)	0.0181 (0.0275)	-0.0198 (0.0275)	0.0301 (0.0299)	0.0163 (0.0297)	0.0138 (0.0270)	0.0149 (0.0184)	0.0161 (0.0208)	-0.0011 (0.0183)
Died < 28 days & gestational age non-missing	0.0126 [0.0021]	0 (0.0003)	-0.0005 (0.0005)	0.0005 (0.0006)	0.002 (0.0050)	-0.0088** (0.0041)	0.0108*** (0.0040)	0.0012 (0.0026)	-0.0052** (0.0022)	0.0064*** (0.0023)
Died < 28 days & born < 36 weeks	0.0021 [0.0009]	0.0008 (0.0006)	0.0016 (0.0010)	-0.0007 (0.0006)	0.0018 (0.0028)	-0.0034* (0.0020)	0.0052** (0.0023)	0.0014 (0.0015)	-0.0012 (0.0012)	0.0026* (0.0013)
Died < 28 days & born < 37 weeks	0.0053 [0.0014]	0.0005 (0.0007)	0.0012 (0.0011)	-0.0007 (0.0006)	0.0025 (0.0035)	-0.0054** (0.0025)	0.0080*** (0.0028)	0.0017 (0.0019)	-0.0025* (0.0014)	0.0042** (0.0016)
Died < 28 days & born < 38 weeks	0.006 [0.0015]	0.0005 (0.0007)	0.0012 (0.0011)	-0.0007 (0.0006)	0.0026 (0.0035)	-0.0054** (0.0025)	0.0080*** (0.0028)	0.0017 (0.0019)	-0.0025* (0.0014)	0.0042** (0.0016)
Died < 28 days & male	-0.0001 (0.0006)	-0.0006 (0.0006)	0.0005 (0.0007)	-0.0001 (0.0006)	0.0083** (0.0035)	0.0002 (0.0025)	0.0081** (0.0033)	0.0043** (0.0019)	-0.0005 (0.0014)	0.0048** (0.0019)
Died < 28 days & female	0 (0.0007)	-0.0003 (0.0008)	0.0003 (0.0005)	0 (0.0007)	-0.0026 (0.0039)	-0.0085*** (0.0031)	0.0059** (0.0029)	-0.0012 (0.0020)	-0.0048*** (0.0017)	0.0035** (0.0017)
Mom was weighed during pregnancy	0.921 [0.0037]	0.0259** (0.011)	0.009 (0.013)	0.017 (0.014)	0.0214* (0.012)	0.0238** (0.011)	-0.003 (0.011)	0.0233*** (0.009)	0.0174** (0.009)	0.006 (0.008)
Blood pressure taken during pregnancy	0.929 [0.0035]	0.008 (0.013)	0.014 (0.014)	-0.006 (0.014)	-0.009 (0.012)	-0.009 (0.010)	0.000 (0.012)	-0.001 (0.010)	0.002 (0.009)	-0.002 (0.010)
Blood test done during pregnancy	0.445 [0.0068]	0.021 (0.030)	0.039 (0.031)	-0.019 (0.034)	-0.007 (0.029)	0.010 (0.028)	-0.016 (0.026)	0.007 (0.022)	0.024 (0.022)	-0.017 (0.022)
Received nutritional information during pregnancy					-0.002 (0.018)	-0.0339* (0.019)	0.0316* (0.018)	-0.002 (0.018)	-0.0339* (0.019)	0.0316* (0.018)

Notes: See Notes to Table 5. Data is from the household survey.

## Versions of Main Tables Including Pooled Effects Across Both Waves

**TABLE 1: *GENERASI* PROGRAM TARGET INDICATORS AND WEIGHTS**

Performance metric	Weight per measured achievement	Potential times per person per year	Potential points per person per year
1. Prenatal care visit	12	4	48
2. Iron tablets (30 pill packet)	7	3	21
3. Childbirth assisted by trained professional	100	1	100
4. Postnatal care visit	25	2	50
5. Immunizations	4	12	48
6. Monthly weight increases	4	12	48
7. Weight check	2	12	24
8. Vitamin A pill	10	2	20
9. Primary enrollment	25	1	25
10. Monthly primary attendance $\geq 85\%$	2	12	24
11. Middle school enrollment	50	1	50
12. Monthly middle school attendance $\geq 85\%$	5	12	60

Notes: This table shows the 12 indicators used in the *Generasi* program, along with the weights assigned by the program in calculating bonus points.

**TABLE 2: *GENERASI* RANDOMIZATION AND IMPLEMENTATION**

	Incentivized Generasi		Non- incentivized Generasi		Control		Total
	P	NP	P	NP	P	NP	
Total subdistricts in initial randomization	61	39	55	45	55	45	300
Total eligible subdistricts	57	36	48	40	46	37	264
Eligible and received <i>Generasi</i> in:							
2007	57	10	48	12	0	0	127
2008	57	33	48	36	0	0	174

Notes: This table shows the randomization and actual program implementation. P indicates the subdistricts that were ex-ante prioritized to receive *Generasi* in 2007 should they be randomly selected for the program; after the priority areas were given the program, a second lottery was held to select which NP subdistricts randomly selected to receive the program should receive it starting in 2007. The randomization results are shown in the columns (Incentivized *Generasi*, Non-incentivized *Generasi*, and Control). Actual implementation status is shown in the rows. Note that conditional in receiving the program, the randomization into the incentivized or non-incentivized version of the program was always perfectly followed.

**TABLE 3: IMPACT ON TARGETED OUTCOMES**

Indicator	Wave II				Wave III			AVERAGE		
	Baseline Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Avg. Treat Effect	Incentive Average Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Health										
Number prenatal visits	7.451 [4.292]	0.333 (0.234)	-0.274 (0.201)	0.608*** (0.220)	0.162 (0.192)	-0.018 (0.188)	0.180 (0.173)	0.238 (0.156)	-0.129 (0.139)	0.367** (0.147)
Delivery by trained midwife	0.673 [0.469]	0.037 (0.027)	0.040 (0.027)	-0.004 (0.025)	0.012 (0.021)	-0.008 (0.023)	0.019 (0.021)	0.024 (0.019)	0.014 (0.020)	0.010 (0.018)
Number of postnatal visits	1.734 [2.465]	-0.160 (0.140)	-0.056 (0.120)	-0.104 (0.140)	-0.028 (0.129)	-0.024 (0.124)	-0.004 (0.129)	-0.092 (0.099)	-0.043 (0.091)	-0.049 (0.102)
Iron tablet sachets	1.587 [1.255]	0.130 (0.084)	0.051 (0.081)	0.078 (0.081)	0.076 (0.058)	0.045 (0.065)	0.031 (0.063)	0.101* (0.052)	0.049 (0.052)	0.052 (0.051)
Percent of immunization	0.654 [0.366]	0.027 (0.018)	0.012 (0.018)	0.015 (0.018)	0.010 (0.015)	-0.006 (0.015)	0.016 (0.014)	0.019 (0.012)	0.003 (0.012)	0.016 (0.011)
Number of weight checks	2.127 [1.189]	0.164*** (0.052)	0.069 (0.049)	0.096* (0.054)	0.176*** (0.055)	0.199*** (0.052)	-0.024 (0.051)	0.168*** (0.041)	0.141*** (0.039)	0.028 (0.040)
Number Vitamin A Supplements	1.528 [1.136]	-0.008 (0.052)	0.005 (0.055)	-0.013 (0.058)	0.085* (0.048)	0.002 (0.054)	0.082 (0.053)	0.037 (0.035)	0.000 (0.040)	0.037 (0.038)
Percent malnourished	0.168 [0.374]	-0.016 (0.016)	0.011 (0.015)	-0.027* (0.016)	-0.017 (0.014)	-0.026* (0.015)	0.009 (0.016)	-0.016 (0.011)	-0.009 (0.011)	-0.006 (0.013)
Average standardized effect health		0.055** (0.024)	0.014 (0.023)	0.041* (0.024)	0.0523** (0.023)	0.027 (0.022)	0.026 (0.022)	0.053*** (0.018)	0.022 (0.018)	0.032* (0.018)
Panel B: Education										
Age 7–12 participation rate	0.948 [0.222]	-0.001 (0.005)	0.003 (0.006)	-0.004 (0.006)	0.005 (0.005)	0.011*** (0.004)	-0.006 (0.005)	0.003 (0.004)	0.008** (0.004)	-0.005 (0.004)
Age 13–15 participation rate	0.823 [0.382]	-0.034* (0.020)	-0.050** (0.023)	0.016 (0.024)	0.020 (0.017)	0.013 (0.016)	0.007 (0.014)	-0.004 (0.014)	-0.015 (0.016)	0.011 (0.014)
Age 7–12 gross attendance	0.904 [0.277]	0.001 (0.005)	0.002 (0.005)	-0.001 (0.006)	0.003 (0.007)	0.004 (0.006)	-0.001 (0.006)	0.002 (0.005)	0.003 (0.004)	-0.001 (0.005)
Age 13–15 gross attendance	0.769 [0.412]	-0.040* (0.021)	-0.065*** (0.024)	0.025 (0.025)	0.026 (0.018)	0.016 (0.017)	0.010 (0.015)	-0.004 (0.015)	-0.019 (0.016)	0.015 (0.015)
Average standardized effect educ.		-0.062 (0.039)	-0.090** (0.045)	0.027 (0.045)	0.048 (0.029)	0.045* (0.027)	0.003 (0.027)	0.001 (0.026)	-0.010 (0.029)	0.011 (0.026)
Panel C: Overall										
Average standardized effect Overall		0.016 (0.023)	-0.021 (0.022)	0.036 (0.024)	0.051** (0.020)	0.033* (0.018)	0.018 (0.019)	0.036** (0.016)	0.011 (0.016)	0.025 (0.016)

**Table 3 continued**

Indicator	Wave II			Wave III			AVERAGE			
	Baseline Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel D: Calculation of total points</i>										
Total points (millions)		0.698 (1.376)	-1.638 (1.263)	2.336* (1.414)	2.889** (1.249)	2.150* (1.152)	0.738 (1.176)	1.866* (1.015)	0.474 (0.963)	1.392 (0.999)
Total points health (millions)		1.941** (0.987)	0.206 (0.933)	1.735* (1.005)	1.962** (0.985)	1.388 (0.982)	0.574 (0.969)	1.922** (0.772)	0.851 (0.767)	1.071 (0.798)
Total points education (millions)		-1.243* (0.710)	-1.844** (0.822)	0.601 (0.836)	0.927 (0.585)	0.762 (0.553)	0.165 (0.516)	-0.056 (0.494)	-0.377 (0.552)	0.321 (0.494)

Notes: Data is from the household survey. Column 1 shows the baseline mean of the variable shown, with standard deviations in brackets. Each row of columns (2) – (4), (5) – (7), and (8) – (10) shows coefficients from a regression of the variable shown on an incentive treatment dummy, a non-incentive treatment dummy, district fixed effects, province \* group P fixed effects, and baseline means, as described in the text. Robust standard errors in parentheses, adjusted for clustering at the subdistrict level. In columns (2) – (4) the treatment variable is defined based on year 1 program placement, and in columns (5) – (7) it is defined based on year 2 program placement, and in columns (8) – (10), which uses pooled data from both waves, it is defined as year 1 placement for the Wave II data and as year 2 placement for the Wave III data. All treatment variables are defined using the original randomizations combined with eligibility rules, rather than actual program implementation, and so are interpretable as intent-to-treat estimates. Columns (4), (7), and (10) are the calculated difference between the previous two columns. Average standardized effects and total points reported in the bottom rows are calculated using the estimated coefficients from the 12 individual regressions above using the formula shown in the text, adjusted for arbitrary cross-equation clustering of standard errors within subdistricts. \* = 10% significance, \*\* = 5% significance, \*\*\* = 1% significance. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect (columns 4, 7, and 10) the only coefficient where the null is rejected taking into account multiple comparisons is prenatal visits in Wave II, which is rejected at the 10 percent level.

**Table 4: Interactions with baseline level of service delivery, average standardized effects**

Indicator	Wave II				Wave III				AVERAGE			
	Generasi Incentive Total Effect * Pre-Period Level	Generasi Non-Incentive Total Effect * Pre-Period Level	Generasi Incentive Additional Effect * Pre-Period Level	Incentive Additional Effect at 10th Percentile	Generasi Incentive Total Effect * Pre-Period Level	Generasi Non-Incentive Total Effect * Pre-Period Level	Generasi Incentive Additional Effect * Pre-Period Level	Incentive Additional Effect at 10th Percentile	Generasi Incentive Total Effect * Pre-Period Level	Generasi Non-Incentive Total Effect * Pre-Period Level	Generasi Incentive Additional Effect * Pre-Period Level	Incentive Additional Effect at 10th Percentile
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Average standardized effect	-0.211** (0.096)	-0.154 (0.112)	-0.057 (0.133)	0.057 (0.042)	-0.187** (0.092)	-0.218** (0.085)	0.031 (0.088)	0.025 (0.033)	-0.202*** (0.065)	-0.193** (0.079)	-0.009 (0.087)	0.037 (0.029)
Average standardized effect health	-0.187*** (0.062)	-0.065 (0.057)	-0.122* (0.068)	0.072* (0.037)	-0.091 (0.066)	-0.004 (0.066)	-0.088 (0.064)	0.061 (0.039)	-0.150*** (0.047)	-0.046 (0.046)	-0.104** (0.051)	0.065** (0.031)
Average standardized effect educ.	-0.259 (0.253)	-0.333 (0.313)	0.074 (0.369)	0.025 (0.086)	-0.378 (0.245)	-0.647*** (0.219)	0.269 (0.235)	-0.049 (0.050)	-0.306* (0.175)	-0.487** (0.222)	0.181 (0.241)	-0.018 (0.051)

Notes: See Notes to Table 3. Data is from the household survey. Columns (1), (5), and (9) interact the incentive treatment dummy with the baseline subdistrict mean of the variable shown, and columns (2), (5), and (10) interact the non-incentive treatment dummy with the baseline subdistrict mean of the variable shown. Columns (3), (7), and (11) are the difference between the two previous columns. Columns (4), (8), and (12) show the estimated additional impact of incentives evaluated at the 10<sup>th</sup> percentile of the indicator at baseline. The indicator-by-indicator regressions corresponding to these average standardized effects are shown in Appendix Table 4.

**Table 5: Impacts on nutrition, mortality, and test scores**

Indicator	Wave II				Wave III			AVERAGE		
	Baseline Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>Panel A: Health</b>										
Malnourished (0–3 years)	0.168 [0.006]	-0.016 (0.016)	0.011 (0.015)	-0.027* (0.016)	-0.017 (0.014)	-0.026* (0.015)	0.009 (0.016)	-0.016 (0.011)	-0.009 (0.011)	-0.006 (0.013)
Severely malnourished (0–3 years)	0.046 [0.003]	-0.007 (0.009)	-0.005 (0.008)	-0.003 (0.009)	-0.016 (0.010)	-0.014 (0.010)	-0.002 (0.009)	-0.012 (0.007)	-0.009 (0.007)	-0.002 (0.007)
Weight for age z score	-0.841 [0.020]	-0.016 (0.050)	-0.017 (0.046)	0.001 (0.052)	0.056 (0.052)	0.067 (0.050)	-0.010 (0.048)	0.021 (0.039)	0.027 (0.035)	-0.006 (0.039)
Wasting (0–3 years)	0.124 [0.006]				-0.005 (0.017)	0.003 (0.016)	-0.008 (0.015)	-0.005 (0.017)	0.003 (0.016)	-0.008 (0.015)
Severe wasting (0–3 years)	0.048 [0.004]				0.000 (0.011)	0.006 (0.012)	-0.006 (0.012)	0.000 (0.011)	0.006 (0.012)	-0.006 (0.012)
Weight for height z score	-0.066 [0.030]				0.032 (0.081)	0.135 (0.084)	-0.103 (0.089)	0.032 (0.081)	0.135 (0.084)	-0.103 (0.089)
Stunting (0–3 years)	0.383 [0.008]				0.034* (0.020)	0.027 (0.020)	0.006 (0.021)	0.034* (0.020)	0.027 (0.020)	0.006 (0.021)
Severe stunting (0–3 years)	0.206 [0.007]				-0.007 (0.019)	0.019 (0.019)	-0.026 (0.018)	-0.007 (0.019)	0.019 (0.019)	-0.026 (0.018)
Height for age z score	-1.369 [0.035]				0.052 (0.096)	-0.013 (0.093)	0.066 (0.098)	0.052 (0.096)	-0.013 (0.093)	0.066 (0.098)
Diarrhea or ARI	0.356 [0.008]	-0.026 (0.023)	0.012 (0.020)	-0.038 (0.024)	0.003 (0.023)	-0.003 (0.022)	0.006 (0.019)	-0.011 (0.017)	0.003 (0.015)	-0.013 (0.016)
Neonatal mortality (0–28 days) (births in past 18 months)	0.013 [0.002]	-0.006* (0.003)	-0.006 (0.004)	0.000 (0.003)	0.006 (0.005)	-0.008* (0.004)	0.014*** (0.004)	0.000 (0.003)	-0.007*** (0.003)	0.008*** (0.003)
Infant mortality (1-12 months) (births in past 24 months)	0.012 [0.002]	-0.004 (0.004)	-0.005 (0.004)	0.001 (0.004)	0.005 (0.005)	0.000 (0.004)	0.005 (0.004)	0.001 (0.003)	-0.003 (0.003)	0.003 (0.003)
Mortality 0–12 months (births in past 24 months)	0.024 [0.003]	-0.006 (0.005)	-0.011** (0.005)	0.005 (0.005)	0.012* (0.006)	-0.004 (0.005)	0.016*** (0.006)	0.003 (0.004)	-0.008** (0.004)	0.011*** (0.004)
Average standardized effect health		0.048** (0.021)	0.029 (0.019)	0.019 (0.021)	-0.029 (0.027)	0.025 (0.025)	-0.054** (0.026)	0.004 (0.022)	0.022 (0.019)	-0.018 (0.022)
<i>Panel B: Education</i>										
Home-based Bahasa test 7–12 years (age-adjusted Z-score)	-0.037 [0.019]				-0.048 (0.048)	-0.001 (0.044)	-0.046 (0.044)	-0.048 (0.048)	-0.001 (0.044)	-0.046 (0.044)
Home-based math test 7–12 years (age-adjusted Z-score)	-0.036 [0.019]				-0.026 (0.049)	0.002 (0.049)	-0.027 (0.048)	-0.026 (0.049)	0.002 (0.049)	-0.027 (0.048)
Home-based total test 7–12 years (age-adjusted Z-score)	-0.046 [0.019]				-0.042 (0.049)	0.010 (0.047)	-0.052 (0.046)	-0.042 (0.049)	0.010 (0.047)	-0.052 (0.046)
Home-based Bahasa test 13–15 yrs. (age-adjusted Z-score)	-0.010 [0.032]				0.034 (0.071)	0.093 (0.078)	-0.059 (0.061)	0.034 (0.071)	0.093 (0.078)	-0.059 (0.061)
Home-based math test 13–15 years (age-adjusted Z-score)	-0.002 [0.032]				-0.002 (0.068)	0.085 (0.071)	-0.087 (0.063)	-0.002 (0.068)	0.085 (0.071)	-0.087 (0.063)
Home-based total test 13–15 years	-0.006				0.012	0.088	-0.076	0.012	0.088	-0.076

Indicator	Wave II			Wave III			AVERAGE			
	Baseline Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
(age-adjusted Z-score)	[0.032]				(0.071)	(0.076)	(0.064)	(0.071)	(0.076)	(0.064)
Average standardized effect on education					-0.012 (0.039)	0.043 (0.042)	-0.055 (0.037)	-0.012 (0.039)	0.043 (0.042)	-0.055 (0.037)
<i>Panel C: Overall</i>										
Average standardized effect overall		0.048** (0.021)	0.029 (0.019)	0.019 (0.021)	-0.026 (0.020)	0.032* (0.019)	-0.058*** (0.019)	-0.005 (0.018)	0.032* (0.017)	-0.037** (0.016)

Notes to Table 5: See Notes to Table 3. Data is from the household survey. Test scores were conducted at home as part of the household survey. Note that for computing average standardized effects, we multiply the health variables by -1, so that all coefficients are defined so that improvements in health or education are positive numbers. Average standardized effects do not include infant mortality (1-12 months), weight for age z score, weight for height z score, and height for age z-score, as these variables were not specified in the pre-analysis plan. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect (columns 4, 7, and 10), in Wave III 0-28 day mortality is rejected at the 5% level in the family of all indicators, and 0-28 day and 0-12 month mortality are rejected in the health comparison at the 5 and 10% levels, respectively. In the pooled comparisons using health as a family, only 0-12 mortality is rejected at the 10% level.

**Table 6: Change in budget allocations**

Indicator	Wave II			Wave III			AVERAGE		
	Incentive Mean (1)	Non-Incentive Mean (2)	Incentive Additional Effect (3)	Incentive Mean (4)	Non-Incentive Mean (5)	Incentive Additional Effect (6)	Incentive Mean (7)	Non-Incentive Mean (8)	Incentive Additional Effect (9)
<i>Panel A: Health vs. education</i>									
All health expenditures	0.470	0.432	0.033** (0.015)	0.490	0.470	0.029** (0.012)	0.481	0.454	0.031*** (0.011)
Health durables	0.099	0.085	0.011 (0.012)	0.126	0.110	0.011 (0.015)	0.114	0.099	0.017* (0.010)
Health benefiting providers	0.017	0.014	0.003 (0.005)	0.022	0.023	0.001 (0.004)	0.020	0.019	0.003 (0.004)
<i>Panel B: Transfers</i>									
All transfers	0.731	0.756	-0.028 (0.025)	0.728	0.743	-0.004 (0.024)	0.729	0.749	-0.023 (0.019)
Education supplies	0.236	0.274	-0.049** (0.025)	0.236	0.270	-0.028 (0.018)	0.236	0.272	-0.038** (0.017)
Supplementary feeding	0.217	0.177	0.022 (0.014)	0.212	0.215	0.009 (0.013)	0.214	0.199	0.010 (0.010)
Subsidies	0.279	0.305	-0.001 (0.024)	0.280	0.258	0.015 (0.020)	0.279	0.278	0.005 (0.018)
Uniform unit values	146,132	158,407	-45,230 (54,467)	108,789	99,881	12,517 (12128)	124,568	123,203	-9,501 (23,378)

Notes: See Notes to Table 3. Data from administrative records, one obs. per village. Since budgets are only available for treatment areas, columns (3), (6), and (9) regress the variable on an incentive subdistrict dummy.

**Table 7: Direct benefits received, incentivized vs. non-incentivized**

Indicator	Wave II			Wave III			AVERAGE			
	Control Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<b>Panel A: Health</b>										
Received supp. feeding at School	0.005 [0.001]	0.005 (0.003)	0.004** (0.002)	0.001 (0.004)	0.006 (0.006)	0.003 (0.005)	0.003 (0.007)	0.005 (0.004)	0.004 (0.003)	0.002 (0.004)
Received supp. feeding at Posyandu	0.464 [0.017]	0.153*** (0.028)	0.156*** (0.027)	-0.003 (0.028)	0.175*** (0.025)	0.204*** (0.022)	-0.030 (0.023)	0.165*** (0.022)	0.184*** (0.019)	-0.020 (0.019)
Received intensive supp. feeding at school	0.026 [0.005]	0.008 (0.007)	0.025** (0.011)	-0.018 (0.011)	0.024** (0.010)	0.019** (0.009)	0.005 (0.010)	0.017*** (0.007)	0.021*** (0.007)	-0.004 (0.007)
Received health subsidy for pre/postnatal care	0.005 [0.002]	0.034*** (0.008)	0.027*** (0.007)	0.007 (0.009)	0.027*** (0.006)	0.036*** (0.007)	-0.009 (0.009)	0.030*** (0.006)	0.032*** (0.006)	-0.002 (0.007)
Received health subsidy for childbirth	0.038 [0.008]	0.101*** (0.017)	0.127*** (0.017)	-0.026 (0.019)	0.097*** (0.016)	0.125*** (0.020)	-0.028 (0.023)	0.099*** (0.012)	0.126*** (0.015)	-0.027 (0.016)
Average standardized effect health		0.287*** (0.037)	0.315*** (0.031)	-0.028 (0.039)	0.267*** (0.031)	0.315*** (0.035)	-0.048 (0.042)	0.320*** (0.039)	0.365*** (0.040)	-0.044 (0.048)
<b>Panel B: Education</b>										
Received scholarship	0.024 [0.005]	0.016** (0.007)	0.008 (0.006)	0.009 (0.008)	0.021** (0.009)	0.009 (0.007)	0.012 (0.009)	0.019*** (0.005)	0.008 (0.005)	0.011* (0.006)
Received uniform	0.013 [0.004]	0.110*** (0.019)	0.083*** (0.012)	0.027 (0.018)	0.082*** (0.013)	0.072*** (0.010)	0.010 (0.015)	0.095*** (0.013)	0.078*** (0.008)	0.017 (0.012)
Value of uniforms (Rp.)	712 [264]	7,845*** (1,569)	6,099*** (1,035)	1,746 (1,447)	7,123*** (1,313)	5,936*** (1,118)	1,187 (1,521)	7,452*** (1,265)	6,028*** (846)	1,424 (1,225)
Received other school Supplies	0.007 [0.003]	0.063*** (0.012)	0.054*** (0.009)	0.010 (0.012)	0.070*** (0.012)	0.053*** (0.010)	0.017 (0.015)	0.067*** (0.010)	0.053*** (0.007)	0.014 (0.011)
Received transport Subsidy	0.007 [0.002]	0.014*** (0.005)	0.005* (0.003)	0.009 (0.006)	0.008*** (0.002)	0.005*** (0.002)	0.003 (0.003)	0.011*** (0.003)	0.005*** (0.002)	0.006* (0.003)
Received other school Support	0.000 [0.000]	0.000 (0.000)	0.000 (0.000)	0.001 (0.000)	0.007** (0.003)	0.006* (0.003)	0.001 (0.004)	0.004** (0.002)	0.003* (0.002)	0.001 (0.002)
Average standardized		0.399***	0.290***	0.109*	0.351***	0.278***	0.073	0.377***	0.288***	0.089*

effect educ.	(0.064)	(0.042)	(0.061)	(0.050)	(0.041)	(0.059)	(0.046)	(0.032)	(0.047)
Panel C: Overall									
Average standardized	0.343***	0.303***	0.040	0.309***	0.296***	0.013	0.356***	0.317***	0.039
effect overall	(0.041)	(0.030)	(0.041)	(0.031)	(0.028)	(0.039)	(0.032)	(0.026)	(0.035)

Note: See Notes to Table 3. Data is from the household survey. Note that instead of showing a baseline mean, we show the wave II control group mean because there is no data available for these categories in Wave I. These regressions also therefore do not control for baseline values. Note that avg. standardized effects do not include value of uniforms since this variable wasn't pre-specified in the analysis plan. Value of uniforms is coded as 0 if the HH doesn't receive the uniforms. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect (columns 4, 7, and 10) none of the coefficients are rejected.

**Table 8: Worker Behavior**

Indicator	Wave II			Wave III			AVERAGE			
	Baseline Mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
<i>Panel A: Health Midwives</i>										
Hours spent in outreach over past 3 Days	3.165 [4.488]	0.796* (0.410)	-0.074 (0.337)	0.870** (0.425)	0.073 (0.389)	0.036 (0.419)	0.038 (0.400)	0.389 (0.299)	0.006 (0.305)	0.383 (0.327)
Hours spent providing public over past 3 days	13.548 [10.056]	0.534 (0.608)	-1.104* (0.594)	1.638** (0.721)	0.672 (0.618)	0.414 (0.566)	0.258 (0.586)	0.577 (0.459)	-0.251 (0.418)	0.828* (0.487)
Hours spent providing private services over past 3 days	10.805 [12.505]	0.211 (0.832)	-0.470 (0.826)	0.681 (0.886)	0.892 (0.674)	0.588 (0.669)	0.304 (0.644)	0.569 (0.525)	0.110 (0.524)	0.458 (0.524)
Total hours spent working over past 3 days	27.518 [15.713]	1.474 (1.046)	-1.722* (1.039)	3.195*** (1.154)	1.621* (0.950)	0.930 (0.931)	0.692 (0.884)	1.496** (0.712)	-0.229 (0.727)	1.725** (0.723)
Number of posyandus attended in past month	4.166 [3.321]	0.202 (0.334)	0.071 (0.225)	0.131 (0.348)	-0.155 (0.248)	0.060 (0.267)	-0.215 (0.324)	0.001 (0.242)	0.073 (0.193)	-0.072 (0.294)
Number of hours midwife per Posyandu	3.039 [1.693]	0.137 (0.130)	0.180 (0.120)	-0.044 (0.127)	0.109 (0.152)	-0.083 (0.133)	0.192 (0.153)	0.127 (0.111)	0.032 (0.095)	0.095 (0.111)
<i>Health centers</i>										
Minutes wait at recent health visits	25.201 [23.736]	0.435 (3.695)	5.693 (4.690)	-5.258 (3.935)	3.361 (4.345)	2.234 (4.342)	1.127 (4.336)	2.038 (3.118)	3.432 (3.373)	-1.394 (3.308)
Percent of providers present at time of observation	.	0.071** [.]	0.109*** (0.039)	-0.038 (0.035)	-0.009 (0.029)	-0.076** (0.030)	0.067** (0.030)	0.030 (0.022)	0.006 (0.023)	0.024 (0.024)
Average standardized effect health	.	0.107** (0.043)	0.057 (0.044)	0.050 (0.047)	0.055 (0.040)	-0.012 (0.039)	0.066 (0.041)	0.077** (0.030)	0.021 (0.030)	0.056* (0.033)
<i>Panel B: Education - Teachers:</i>										
Percent present at time of interview (primary)	.	0.013 [.]	-0.009 (0.013)	0.021 (0.015)	0.000 (0.012)	0.022** (0.011)	-0.023** (0.011)	0.005 (0.009)	0.009 (0.009)	-0.004 (0.010)
Percent present at time of interview (junior secondary)	.	-0.002 [.]	0.020 (0.024)	-0.022 (0.026)	0.005 (0.020)	-0.026 (0.020)	0.031 (0.022)	0.003 (0.017)	-0.006 (0.015)	0.009 (0.018)
Percent observed teaching (primary)	.	-0.006 [.]	-0.050 (0.042)	0.044 (0.042)	-0.003 (0.040)	-0.012 (0.041)	0.009 (0.038)	-0.005 (0.028)	-0.028 (0.029)	0.023 (0.028)
Percent observed teaching (j. sec.)	.	-0.069 [.]	-0.052 (0.047)	-0.018 (0.049)	0.039 (0.049)	0.024 (0.048)	0.015 (0.044)	-0.010 (0.033)	-0.011 (0.033)	0.002 (0.032)
Average standardized effect educ.	.	-0.022 (0.043)	-0.046 (0.044)	0.024 (0.047)	0.023 (0.041)	0.009 (0.042)	0.014 (0.042)	0.002 (0.030)	-0.014 (0.029)	0.016 (0.030)
<i>Panel C: Overall</i>										
Average standardized effect overall	.	0.064** (0.031)	0.023 (0.032)	0.041 (0.034)	0.044 (0.030)	-0.005 (0.028)	0.049 (0.031)	0.052** (0.022)	0.009 (0.021)	0.043* (0.024)

Note: Data is from the survey of midwives (top panel); direct observation of schools (middle panel), household survey (bottom panel; wait times) and direct observation of health centers (bottom panel, provider presence). See also Notes to Table 3. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect (columns 4, 7, and 10) the only coefficient where the null is rejected taking into account multiple comparisons is total hours spent working over the past 3 days in Wave 2, where health is the family.

**Table 9: Community effort**

Indicator	Baseline Mean	Wave II			Wave III			AVERAGE		
		Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
<i>Community effort at direct service provision:</i>										
Number of posyandus in village	4.519 [3.504]	-0.092 (0.124)	0.004 (0.147)	-0.096 (0.126)	0.128 (0.178)	0.196 (0.176)	-0.068 (0.148)	0.027 (0.140)	0.107 (0.151)	-0.080 (0.120)
Number of posyandu meetings in past year at selected posyandu	. [.]	-0.003 (0.102)	0.082 (0.111)	-0.084 (0.102)	-0.113 (0.112)	-0.061 (0.091)	-0.052 (0.100)	-0.062 (0.079)	0.003 (0.076)	-0.065 (0.077)
Number of cadres at posyandu	. [.]	0.174 (0.113)	0.197 (0.153)	-0.023 (0.138)	0.294** (0.139)	0.358** (0.171)	-0.064 (0.165)	0.238** (0.106)	0.285** (0.139)	-0.048 (0.133)
<i>Community effort at outreach</i>										
Number of sweepings at selected posyandu in last year	. [.]	-0.296 (0.394)	0.042 (0.377)	-0.338 (0.389)	-0.140 (0.341)	-0.628* (0.344)	0.488* (0.294)	-0.194 (0.265)	-0.344 (0.256)	0.151 (0.256)
Number of primary school comm. meetings with parents in past year	. [.]	0.066 (0.133)	-0.070 (0.133)	0.136 (0.121)	0.002 (0.181)	-0.125 (0.182)	0.126 (0.137)	0.031 (0.117)	-0.099 (0.119)	0.130 (0.093)
Number of junior sec. school committee meetings w parents	2.309 [1.973]	-0.121 (0.112)	0.032 (0.118)	-0.153 (0.126)	0.214 (0.147)	0.209 (0.222)	0.005 (0.206)	0.066 (0.103)	0.125 (0.147)	-0.059 (0.140)
<i>Community effort at monitoring</i>										
Number of primary school committee members	. [.]	0.761* (0.392)	-0.503 (0.410)	1.264*** (0.478)	-0.003 (0.334)	0.195 (0.402)	-0.198 (0.344)	0.317 (0.287)	-0.085 (0.314)	0.401 (0.297)
Number of junior sec school committee members	8.259 [4.763]	-0.844 (0.992)	-1.421 (0.933)	0.577 (0.539)	0.199 (0.331)	0.216 (0.332)	-0.017 (0.291)	-0.295 (0.497)	-0.518 (0.474)	0.223 (0.298)
Number of prim. school committee meetings with teachers in past year	. [.]	-0.124 (0.358)	-0.367 (0.357)	0.243 (0.354)	-0.121 (0.316)	-0.096 (0.319)	-0.025 (0.268)	-0.129 (0.255)	-0.213 (0.252)	0.084 (0.211)
Number of j. sec. school committee meetings with teachers in year	4.476 [5.465]	0.471 (0.424)	0.125 (0.394)	0.346 (0.456)	0.532 (0.342)	0.567 (0.346)	-0.035 (0.365)	0.494* (0.262)	0.374 (0.257)	0.121 (0.269)
Average standardized effect		0.013 (0.022)	-0.009 (0.025)	0.023 (0.023)	0.043* (0.025)	0.047 (0.031)	-0.004 (0.029)	0.026 (0.018)	0.016 (0.022)	0.010 (0.019)

Note: Data is from survey of the head of the posyandu and the head of schools. See also Notes to Table 3. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect, no coefficients are individually rejected.

**Table 10: Within-subdistrict targeting**

Indicator	Wave II			Wave III			AVERAGE		
	Baseline Mean	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect	Generasi Non-Incentive Top 3 Quintiles Additional Effect	Generasi Incentive Top 3 Quintiles Additional Effect
<i>Panel A: Targeting of direct benefits</i>									
Average standardized effect health	-0.073 (0.169)	0.093 (0.117)	-0.165 (0.202)	-0.124 (0.126)	-0.109 (0.102)	-0.014 (0.147)	-0.125 (0.103)	-0.032 (0.085)	-0.093 (0.129)
Average standardized effect educ.	-0.058 (0.147)	-0.067 (0.163)	0.009 (0.210)	-0.170** (0.078)	-0.085 (0.073)	-0.085 (0.096)	-0.109 (0.071)	-0.065 (0.065)	-0.044 (0.091)
Average standardized effect overall	-0.066 (0.112)	0.022 (0.094)	-0.088 (0.143)	-0.147* (0.087)	-0.097 (0.059)	-0.050 (0.096)	-0.117* (0.070)	-0.049 (0.053)	-0.068 (0.084)
<i>Panel B: Heterogeneity in improvements in main indicators</i>									
Average standardized effect health	-0.072 (0.064)	0.047 (0.067)	-0.119 (0.077)	0.063 (0.069)	0.000 (0.063)	0.063 (0.065)	0.001 (0.049)	0.033 (0.044)	-0.032 (0.052)
Average standardized effect educ.	-0.044 (0.087)	-0.073 (0.104)	0.029 (0.120)	-0.076 (0.073)	0.057 (0.077)	-0.133* (0.071)	-0.075 (0.059)	0.000 (0.067)	-0.075 (0.073)
Average standardized effect overall	-0.062 (0.056)	0.007 (0.060)	-0.070 (0.070)	0.017 (0.057)	0.019 (0.050)	-0.002 (0.050)	-0.024 (0.042)	0.022 (0.040)	-0.046 (0.045)

Notes: Data is from the household survey. For each indicator in Table 3, the regression interacts the Generasi treatment variables for a dummy for a household being in the top 3 quintiles of the baseline per-capita consumption distribution. Average standardized effects for the interaction with the top 3 quintiles variable are shown in the table. Panel A examines the indicators of direct benefits shown in Table 7 and Panel B examines the 12 main program indicators examined in Table 3.

**Table 11: Spillovers on non-targeted indicators, average standardized effects by indicator family**

Family of indicators	Wave II			Wave III			AVERAGE		
	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
<i>Panel A: Health</i>									
Utilization of non-incentivized health services	0.019 (0.020)	-0.009 (0.021)	0.029 (0.022)	0.038* (0.020)	0.017 (0.020)	0.021 (0.019)	0.027* (0.015)	0.004 (0.015)	0.023 (0.015)
Health services quality	0.079** (0.038)	0.064* (0.039)	0.015 (0.040)	0.041 (0.036)	0.040 (0.038)	0.001 (0.036)	0.059** (0.029)	0.052* (0.029)	0.008 (0.027)
Maternal knowledge and Practices	0.026 (0.029)	0.025 (0.028)	0.002 (0.030)	0.033 (0.029)	0.043 (0.027)	-0.011 (0.026)	0.029 (0.022)	0.034 (0.022)	-0.005 (0.021)
Family composition decisions	0.014 (0.019)	-0.012 (0.021)	0.026 (0.022)	0.023 (0.022)	-0.007 (0.026)	0.029 (0.023)	0.025 (0.020)	-0.014 (0.024)	0.038* (0.022)
Average standardized effect health	0.035** (0.016)	0.017 (0.016)	0.018 (0.017)	0.034** (0.016)	0.023 (0.016)	0.010 (0.014)	0.035*** (0.013)	0.019 (0.013)	0.016 (0.012)
<i>Panel B: Education</i>									
Other enrollment metrics	-0.071 (0.049)	-0.051 (0.046)	-0.019 (0.049)	-0.013 (0.021)	0.006 (0.020)	-0.019 (0.018)	-0.023 (0.017)	-0.011 (0.018)	-0.012 (0.018)
Transportation to school (cost and distance)	-0.077 (0.058)	-0.034 (0.050)	-0.043 (0.060)	0.004 (0.042)	0.022 (0.041)	-0.018 (0.042)	-0.025 (0.036)	0.002 (0.035)	-0.027 (0.039)
Avoiding child labor (higher #s = less child labor)	-0.025 (0.022)	-0.107*** (0.038)	0.083** (0.034)	0.012 (0.025)	0.007 (0.020)	0.005 (0.022)	-0.006 (0.018)	-0.039* (0.021)	0.034* (0.020)
Average standardized effect educ.	-0.057** (0.029)	-0.064** (0.030)	0.007 (0.032)	0.001 (0.018)	0.012 (0.017)	-0.011 (0.017)	-0.018 (0.016)	-0.016 (0.016)	-0.002 (0.017)
<i>Panel C: Overall</i>									
Average overall standardized effect	-0.005 (0.015)	-0.018 (0.017)	0.013 (0.019)	0.020 (0.012)	0.018 (0.012)	0.001 (0.011)	0.012 (0.010)	0.004 (0.011)	0.008 (0.011)

Notes: See Notes to Table 3. Data is from the household survey. Each row presents average standardized effects from a family of indicators, with the detailed indicator-by-indicator results shown in Appendix Table 5. The individual indicators consist of the following : Health utilization consists of deliveries based in facilities (as opposed to at home), use of family planning, use of curative health services, prenatal visits beyond 4 per pregnancy, vitamin A drops beyond 2 per child. Health services quality consists of quality of prenatal care services and quality of posyandu services, where quality is measured as the share of services that are supposed to be provided that are actually provided during a typical visit. Maternal knowledge and practices are the fraction initiating breastfeeding within the first hour after birth, share with exclusive breastfeeding, maternal knowledge about proper treatment of several child health conditions, and a questions about a women's role in decisions about children. Family composition is the fertility rate and out migration. Other enrollment metrics are gross high school enrollment, dropout rates, primary to junior secondary transition rates, number of hours children attend school, and the numbers attending primary, junior secondary, and senior secondary informal education (Paket A, B, and C). Transportation to school is the distance to junior secondary school, time spent traveling one-way to junior secondary school, and transportation cost each way to school. Child labor is the fraction age 7-15 who works for a wage, hours spent working for a wage, a dummy for doing any wage work, and a dummy for doing any household work.

**Table 12: Manipulation of performance records**

Indicator	Wave II			Wave III			Average			
	Baseline mean	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Treatment Effect	Non-Incentive Treatment Effect	Incentive Additional Effect	Incentive Average Treatment Effect	Non-Incentive Average Treatment Effect	Incentive Average Additional Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Panel A: BCG Scar										
False "yes" in recorded BCG Vaccine	0.079 [0.270]	0.032** (0.015)	0.006 (0.014)	0.026* (0.015)	0.004 (0.013)	0.003 (0.014)	0.001 (0.014)	0.014 (0.010)	0.003 (0.011)	0.012 (0.010)
False "yes" in declared BCG Vaccine	0.111 [0.314]	0.033** (0.015)	0.021 (0.015)	0.012 (0.016)	0.013 (0.013)	0.000 (0.014)	0.013 (0.013)	0.020** (0.010)	0.007 (0.010)	0.014 (0.010)
Children with no record card	0.246 [0.431]	-0.054*** (0.019)	-0.038** (0.019)	-0.016 (0.018)	-0.023 (0.019)	-0.053*** (0.018)	0.030* (0.017)	-0.030** (0.015)	-0.043*** (0.014)	0.013 (0.014)
Panel B: Attendance										
Attend. Rate – difference between recorded and observed	8.178 [26.000]	-1.925 (1.696)	-2.593* (1.506)	0.668 (1.736)	0.740 (2.021)	2.360 (2.125)	-1.620 (1.910)	-0.242 (1.340)	0.508 (1.293)	-0.750 (1.274)
Attend. rate observed	87.496 [25.577]	1.350 (1.632)	2.890* (1.469)	-1.540 (1.669)	-0.970 (1.874)	-2.157 (2.017)	1.187 (1.839)	-0.161 (1.272)	-0.281 (1.248)	0.120 (1.237)
Attend. rate recorded	95.795 [7.438]	-0.609* (0.356)	0.186 (0.367)	-0.794* (0.434)	-0.201 (0.441)	0.142 (0.423)	-0.343 (0.437)	-0.361 (0.305)	0.178 (0.283)	-0.539* (0.319)
Panel C: Difference between admin. and household data										
Average standardized effect health				-0.074 (0.047)			-0.058 (0.067)			-0.063 (0.040)
Average standardized effect educ.				-0.137*** (0.052)			-0.115 (0.097)			-0.098** (0.039)
Average standardized effect				-0.097** (0.044)			-0.079 (0.071)			-0.076** (0.036)

Notes: See Notes to Table 3. Data from Panel A comes from the household survey. False "yes" is defined as 1 if the child has no observed BCG scar on his/her arm but the records say that the child received the BCG immunization. For Panel B, the observed attendance is the percent of students attending on the day of the survey, and the recorded attendance rate is the attendance in the record book on a fixed day prior to the survey taking place. For Panel C, the dependent variable is the difference between what is recorded in MIS data for each of the 12 indicators and the corresponding number from the household survey, with average standardized effects shown in the table. A positive coefficient would indicate inflation of the program statistics (i.e. MIS is systematically higher than household). Note that since MIS data is available only for Generasi areas, Panel C only compares the incentivized with non-incentivized areas. Applying Family-Wise Error Rates (Romano and Wolf 2005) to the Incentive Additional Effect (columns 4, 7, and 10) no individual coefficients are rejected.

**Table 13: Do relative payments prevent money from flowing to richer areas?**

	Wave II				Wave III				Pooled			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Actual incentive payments												
Avg. pc exp.	-1.325 (7.078)			-1.749 (6.769)	13.48 (12.28)			15.09 (12.45)	3.891 (6.954)			4.376 (6.734)
Distance to district		79,237** (33,578)		82,873** (34,038)		83,353** (39,741)		78,305** (36,635)		82,429*** (30,403)		82,698*** (30,027)
Village poverty rate			976,885 (2,980,000)	1,806,000 (2,752,000)			-2,413,000 (6,102,000)	-766,739 (5,976,000)			-484,574 (3,661,000)	619,756 (3,477,000)
Num obs.	453	453	441	441	388	388	377	377	841	841	818	818
Panel B: Counter-factual incentive payments without relative performance within subdistricts												
Avg. pc exp.	4.330 (3.172)			4.405 (2.826)	-2.190 (5.832)			-1.052 (5.758)	0.102 (3.169)			0.462 (3.193)
Distance to district		9,335 (9,646)		9,249 (10,100)		3,932 (20,136)		3,076 (20,298)		5,096 (11,261)		3,856 (11,577)
Village poverty rate			-6,301,000*** (1,945,000)	-6,060,000*** (1,952,000)			-694,408 (4,014,000)	-702,532 (4,025,000)			-4,060,000* (2,215,000)	-4,005,000* (2,199,000)
Num obs.	453	453	441	441	388	388	377	377	841	841	818	818

Notes: Data is from program administrative records. Dependent variable is the amount of bonus money given to a village, in Rupiah. Each column reports the result from a separate regression. Each observation is a village. The sample is the 8 sampled villages within each of the incentivized subdistricts. Note that MIS data on total points is incomplete for Wave III (second year of program). Standard errors adjusted for clustering by subdistrict.