Abstract: A Follow-Up Evaluation of Philadelphia's Health Resource Centers

The 1990's were a time of declining teen fertility and in Pennsylvania the decrease in the adolescent birth rate was even greater than it was nationally. Likewise, teenage abortion, Gonorrhea, Syphilis, and AIDS rates have been decreasing. Meanwhile, in an attempt to reduce unprotected intercourse, and thereby reduce unintended pregnancy and STD transmission, increasing numbers of school districts have implemented programs to make condoms available to students. These condom availability programs (CAPs) may have been a factor driving the decline in birth and STD rates. The determination of the efficacy of these programs is still quite relevant. In 2000 there were over 800,000 teenage pregnancies in the United States over half of which culminated in live births. In this paper, we examine the effects of one such program, implemented in Philadelphia public schools.

To date, the research on CAPs has consistently shown that condom availability programs do not increase the rate or hasten the onset of sexual activity. It is less clear, however, whether CAPS are effective in increasing condom usage, and less clear still, whether they are effective in preventing teen pregnancy. No study has yet examined birth or STD rates in CAP schools. Our study is unique in examining the effects of a CAP on these neglected outcomes.

In 1991, nine Philadelphia public schools began making condoms available to students. They did so by establishing in-school Health Resource Centers (HRCs), staffed by health care professionals who provide counseling, referrals, and condoms. The first published evaluation of the Philadelphia HRCs found no significant differences between the sexual activity and condom usage of students at the schools with and without the centers. On the other hand, it also found that a majority of students were aware of the HRC in their schools, and a little less than half of those who knew of it took advantage of the services it offered. Thus, although they had little effect at the beginning, we hypothesized that the HRCs influence would increase as the years passed and the centers gained visibility and credibility. If the HRCs were successful in increasing condom usage, then presumably there would be a reduction in the incidence of STDs, pregnancies, and births.

Our study builds on and extends the earlier analysis using more complete data. By following students through high school, we can identify the effects of longer exposure to the program. We also were able to examine fertility rates by obtaining complete birth records for the entire sample. We were thus able to examine four years of STD, pregnancy and birth rates for the cohort.

Our data are from the Philadelphia Educational Longitudinal Study, which has been following 1500 randomly selected Philadelphia public school students for eight years. These students and their parents were first interviewed in 1996, just before the students entered 8th grade. The students and parents were reinterviewed during the 9th grade school year and then once again during each summer following 9th through 12th grades. At the second wave (9th grade), an additional randomly selected sample of students attending HRC schools were added. For this study, we examined data from the waves during which the students would have had access to the clinics, that is to say, from matriculation to graduation, waves 2 through 5.
We examine three primary outcomes: contraction of an STD (as reported by the student), pregnancy (as reported by the student), and birth (as reported by the student and also as

reported by the official birth records). We compare students at HRC schools to students at matched schools. The comparison group of schools was matched to the HRC schools using the following factors: economic and ethnic composition of the student bodies, the location of the schools and their academic standing.

Having matched the schools, we conducted a bivariate analysis, comparing the STD, pregnancy, and birth rates at HRC and match schools in a series of nested models. First we compared students who were surveyed at least in their senior year who attended an HRC or match school in 9th grade. Then we "turned up the resolution" to look for missed results which may have been the result of greater exposure. In order to do this, we limited the sample to those students who were surveyed at least in their senior year who stayed in their HRC or match school all four years. Finally, we examined the birth records of all of the students who participated in PELS at least once during high school and who stayed put in HRC/match all 4 years. Within each of these subsets, we compared HRC to match students by gender, race, date of sexual initiation, and combinations of the three. We also looked for differences between the HRC schools by grouping them into effectiveness categories based on reports from the Family Planning Council on the percentage of the student body who had visited the center. The categories were devised as follows: Low <25% visitation, Medium 25-40% visitation, High 40+% visitation.

We have found no consistent significant differences between HRC and match students, except for births among African American males. Date of sexual initiation, frequency of condom usage, STD contraction, pregnancy, and birth do not differ significantly between students in the two groups of schools. Also, students at the high-utilization HRC schools did not differ significantly from students at the other HRC schools. No such difference appears even when we limit our sample to those students who remained in their HRC or match school for four years. Apparently, the HRCs have not had the impact that their supporters envisioned.