Why money will not cure under-immunization

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Societal attitudes about immunization are complex. Attitudes about the finances of immunization are, in some ways, even more complex.

In the 1990s, the Clinton Administration proposed a national vaccine program that would have provided free vaccine to all children in the United States. The overall cost of the program would have been lower than the current cost of immunization programs. This seemed to be an uncontroversial program. It wouldn't have forced anyone to get vaccinated, but it would have lowered the cost and improved access for anyone who chose to do so. The program made no headway in Congress. Instead, we collectively chose to stick with our inefficient, expensive, and complex system for financing childhood immunizations programs. The CBO estimates that we pay \$1–2 billion more per year as a result.

Ropeik proposes that the primary societal concern regarding vaccine refusal is an economic one. He cites data to show that routine childhood vaccinations save the United States \$50 billion. Controlling outbreaks costs public health departments millions. Thus, his argument goes, people who refuse vaccine are imposing costs upon the rest of us. Further, since it is clear that rational arguments have not and will not lead people to change their beliefs or their behaviors, he suggests that we try market incentives instead.

He proposes 2 monetary incentives. The first is to raise the cost of opting out of immunization by, for instance, requiring people to visit a doctor or get a statement from a member of the clergy. The second is through direct financial rewards or penalties—

either higher health insurance costs for people who refuse vaccines or through bonuses for parents whose children receive their immunizations in a timely manner.

Of these, bonuses seem the more workable solution. The health insurance market is far too complicated—and family structures far too variable—to enable an efficient system for determining who is responsible for immunizing children and how to adjust insurance premiums to take account of childhood immunization status.

Bonuses are used effectively in other countries.

It is unlikely, however, that payments for immunization will put a dent in the problem. Getting vaccines has costs. People have to go to the doctors. Vaccines cost money. Not all insurance plans cover vaccines. Given all this, people who seek vaccines today are willing to pay for them. The bonus would have to be large enough to offset these costs and thus represent a true net benefit to those who currently do not incur the expenses of vaccination but who, in theory, would if they were incentivized to do so.

The program would be expensive. There are about 4M children born each year in the United States. Imagine that each would get \$100 bonus for completing the series of routine childhood vaccinations. That would be \$400 million per year. Most of that money would go to people who are already immunizing their children. The key question about the efficacy of the program would turn on how effective it was in changing the behavior of those who currently refuse vaccines.

As always, the devil is in the details. Would parents get a bonus for each vaccine that their child receives? Would they

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get the bonus only when they've completed the entire series of routine childhood vaccines? Or only when they complete it on time? How would the program be administered? Would states have the right to opt out?

Unfortunately, I think that the solution to under-immunization of children in the United States is not a simple economic one. Instead, under-immunization always exists in a semi-stable equilibrium with outbreaks of infectious disease.

When disease is common, most people seek immunizations. As most people seek immunizations, the prevalence of disease goes down. As the prevalence of disease goes down, more people refuse immunizations for their children. At first, most of the kids are fine because herd immunity protects them. As herd immunity wanes, new outbreaks occur. As a result, more parents choose to immunize their children. This dynamic has existed since the early days of vaccination. Monetary

incentives to vaccinate would cost a lot but it is unlikely that they would change this dynamic. The dynamic will only change as a result of continued efforts at education by pediatricians, policymakers, and parents who have lost the gamble.

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