Global Health Impact: A Basis for Labeling and Licensing Campaigns?

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I. Introduction

Every year 9 million people are diagnosed with tuberculosis, every day more than 13,400 people are infected with AIDS, and every 30 seconds malaria kills a child (CDC, 2005; UNICEF, 2005; UNAIDS, 2004). About a third of all deaths, 18 million a year or 50,000 every day, are poverty-related (WHO, 2004, Annex Table 2). Most of the world’s health problems afflict poor countries and their poorest inhabitants (WHO, 2004). There are many reasons why so many people die of poverty-related causes. One reason is that the poor cannot access many of the existing drugs and technologies they need. Another is that little of the research and development done on new drugs and technologies benefits the poor. There are several proposals on the table that might incentivize pharmaceutical companies to extend access to essential drugs and technologies to the global poor. Still, the problem remains – the poor are suffering and dying from lack of access to essential medicines. So, it is worth considering a new alternative. This paper suggests rating pharmaceutical and biotechnology companies based on how some of their policies impact poor people’s health. For, it argues, it might be possible to leverage a rating system to encourage companies to extend access to essential drugs and technologies to the poor.

Consider, briefly, a few possible uses for a rating system that this paper will explore more fully below. One possibility is to give the highest rated companies, in given year, a “Global Health Impact” label to use on their products. These companies would then have an incentive to use the label to garner a larger share of the market as those engaged in trade and investment may prefer to purchase goods and invest in companies that help the poor. The idea here is along the lines of a Fair Trade, Buy Red, or Sustainable Forestry labeling campaign. Having a rating system for pharmaceutical and biotechnology companies would also open the door to all kinds of fruitful social activism including global health licensing campaigns. Pharmaceutical and biotechnology companies rely, to a large extent, on university research and development. So, if universities give preference to highly-rated companies in licensing their technology, companies will have an incentive to become highly rated. This idea is along the lines of the Universities
Allied for Access to Essential Medicines licensing campaign. Of course, a rating system even with an associated labeling and licensing campaign will not solve all of the poor’s health problems. But, this proposal has some advantages over and might be used in conjunction with existing proposals. Together they may have a significant impact on access to essential drugs.

II. Creating a Good Rating System

One possible rating system is the recently released Access to Medicine Index publicized by the New York Times, which rates companies based on their policies but does not (yet) provide the basis for a labeling or licensing campaign (Access to Medicine, 2008). The Access to Medicine Index rates companies along several dimensions including their R&D, Patenting, Pricing, and Drug Donation programs. It aims to improve access to medicine around the world (Access to Medicine, 2010).

Select Access to Medicine Index Ratings

![Figure 3. Select Access to Medicines Index Ratings](image)

The rest of this section will consider the prospects for creating a better index, however, for there are some serious problems with the Access to Medicine Index. One problem is that the ratings are primarily subjective and may be unduly influenced by irrelevant information. The index solicits input from many “stake-holders” (pharmaceutical companies, doctors, non-governmental organizations etc.) irrespective of
whether their interests compete with the interests of the poor. It is not clear what impact different interest
groups have on the final rating. Another problem is that the index gives companies credit just for having
good policies in place (more than 50% of the original Index was policy based). This is analogous to
rewarding someone based on how they say they are going to carry out a project. As anyone familiar with
Enron’s official code of ethics knows, good policies do not guarantee good outcomes.

A better rating system would be objective and output based. Consider the distinction between
input and output based rating systems. Input based systems reward companies based on the amount of
resources they put into creating and helping poor people access essential drugs and technologies. Output
based systems reward companies based on how their R&D results and charitable contributions etc. actually
impact the health of the poor. If, for instance, a system just considered R&D and charity budgets, it would
be rewarding companies’ based on their input. This is analogous to rewarding someone based on how much
time or money they invest in a project. If, on the other hand, a system considered how a company’s R&D
and charitable donations impacted the health of the poor, it would be rewarding the company for its
output. This is like paying someone for how much work they complete on a project.

There are some problems for an input measure. Companies rewarded for their investments might
make it seem like they are investing more in helping the poor than they are, just as someone who is
rewarded for their time or monetary investment in a project might make it seem like they are investing
more than they are. This is a real concern given that biotechnology and pharmaceutical companies may
already be exaggerating their R&D costs (Angell, 2004). Furthermore, input measures create no incentive
to be efficient. Finally, it is not clear that we want to provide the same reward to companies that produce
little with their investments as to companies that make productive investments. If what we really care about
is whether the poor can access essential drugs and technologies, it is probably better to reward companies
based on how much their policies actually increase access.

To create an objective, output based rating system researchers should probably look at many
aspects of companies’ R&D and charitable endeavors relying as much as possible on hard data instead of
subjective opinion. The goal would be to measure the number of disability adjusted life-years (DALYs), or
whatnot, companies’ R&D and charitable efforts are averting in developing countries.” When impact is too
difficult to capture, however, other output variables may be useful as proxies for impact. In looking at charitable contributions, researchers might consider the number of doses of a drug donated to aid organizations in developing countries and the average impact of a dose of medicine in good conditions. This would be a very rough proxy for impact given that conditions may not be ideal at all. So it would be better to have more information if it is available. Once researchers estimate impact, they might avoid just rewarding larger companies that have greater resources to invest in helping the poor secure essential drugs and technologies by dividing each company’s impact by some measure of that company’s size (e.g. their net worth, revenues, or profits).vi The details on these points would, of course, have to be worked out carefully. The result would generate a final ranking of companies.

If it is too difficult to find verifiable information on the impact of some of companies’ charitable or R&D endeavors, that may not present an insurmountable obstacle for a rating system. It may be possible to just start with the available information, eliciting more information as a condition of rating companies once the system is up and running.vii

A rating system, if effective, will create strong incentives for companies to do whatever it is that improves their rating. Suppose, for instance, that it is possible to establish how much each company’s charitable contributions are doing for the poor by looking at its a) drug donations, b) price reductions, c) approved and verifiable health-projects (e.g. health-related infrastructure improvements in developing countries), d) technology transfer programs for developing countries and e) efforts to enhance developing countries’ research capacities.viii Suppose, however, researchers lack information on the impact of companies’ investments in good health-projects, technology transfer efforts, and efforts to enhance developing countries’ research capacities, so left this information out of its rating schema.ix Then companies would have an incentive to cut their health-projects budgets etc. and put their resources into drug donations and differential pricing instead.x

It may not be a problem, however, if a rating system creates some bad incentives, as long as the bad incentives they create are not efficacious. After all, the money that companies put into donation and price reduction programs need not come from their health-related infrastructure investment budgets etc. It could come from executive salaries.
Similarly, incompleteness may not pose an ethical problem for a rating system. It may be permissible for researchers to just do what they can to encourage donations and price reductions. This may just provide reason for others to encourage companies to make appropriate health-related infrastructure investments.

These are substantive philosophical points. Consider an analogy. Those who defend child labor often argue that if we eliminate child labor, children and their families will suffer. A child’s next-best alternative might be prostitution. Even if this is true, however, it gives us no reason to allow child labor. (At least it gives us no more reason to allow child labor than finding out that a child prostitute’s next best alternative is slavery gives us to allow child prostitution). Rather, it gives us reason to try to both eliminate child labor and provide better jobs for adults and schools for children. None of this means, however, that it is impermissible for one group to open a school and another to expose child labor. Even with a complete rating system, this paper’s proposals will not provide a complete solution to the problems the poor face in meeting their basic health needs, but they may help protect poor peoples’ ability to do so.

So consider, for instance, how it might be possible to start a rating system by estimating R&D output (though this would not be necessary for many companies producing generic drugs). It would take a very long time to look at all the drugs each company produces, even in a given year. Fortunately, researchers might estimate companies’ R&D output by looking at all the FDA approved “orphan” drugs and seeing how much each could alleviate the GDB. Orphan drugs are those that biotechnology and pharmaceutical companies expect (or say they expect) to have very small markets in the US. So the drugs and technologies for neglected diseases that we would want to incentivize companies to produce should be listed as orphan (companies already have incentives to produce drugs and technologies for which there is a large US market). Of course, some orphan drugs will not help the poor and there is an incentive for companies to get as many drugs as possible listed as orphan because they get up to a 50% tax credit for testing orphan drugs (Angell, 2004). Researchers might, however, just do an effectiveness analysis on orphan drugs that address neglected diseases (to estimate how much each of these drugs will help the poor).

Although there are different ways of doing effectiveness analysis and the calculations can get quite complex, the basic idea is simple. First, look at each drug’s market price and the amount of need equivalent
dosages of each will fulfill in developing countries (e.g. in DALYs). Then, to insure that companies do not get too much credit for producing slight variations on existing drugs and technologies, consider how much improvement each drug offers over the next best alternative. To do this it might suffice to simply subtract the expected benefit to the poor of the best existing drug or technology from the expected benefit of the new drug or technology. Companies would, however, receive credit if their products alleviate more disease because they have better pricing strategies, for instance, even if their drugs offer no new therapeutic improvements. To avoid just rewarding larger companies that have greater resources to invest in helping the poor secure essential drugs and technologies, it might suffice to divide each company’s impact by some measure of that company’s size (e.g. their net worth, revenues, or profits).

The details of this schema would have to be worked out carefully and might diverge significantly from those suggested here. Economic analysis might help maximize the positive impact on the poor. It might be more difficult to capture the impact biotechnology and pharmaceutical companies are having on the poor than to create standards for good working conditions as the Workers’ Rights Consortium has tried to do. Still, there is a lot of work on cost-effectiveness analysis in the literature. So, it should be possible to design and improve upon some such rating system, even if it is initially quite imperfect.

It is not clear whether the proposal should include a mechanism to penalize companies for “dumping” drugs on developing country markets. Donations could, conceivably, do more harm than good for the poor in the long run if, for instance, they drive generic competitors out of business. If this is the case, perhaps companies can receive credit for making donations on the condition that they are given in ways that will not have such consequences. It is probably best, however, to address problems like this as they arise by instituting some forum where objections to allowing a company to receive credit for a proposed project can be heard. For it is impossible to foresee every problem. It may also be counterproductive to spend time worrying about problems that may not arise.

Before saying a few words about how this rating system might be used, consider how it might be developed and administered. A good rating system should probably be developed and administered by an appropriately impartial and transparent rating organization. Perhaps a non-governmental group like Doctors Without Borders or the World Health Organization would be willing to develop and oversee such a project.
If the organization does not have the relevant research capacity, they might partner with academics specializing in health evaluation methodologies. Alternately, governments or international organizations might develop the rating system and provide the requisite oversight (as the US government does with the USDA Organic label and the International Standardization Organization does with the ISO 14000 environmental management standards). In either case, however, input from all the relevant stakeholders including biotechnology and pharmaceutical companies may be essential to create a good and sustainable rating system. This will help insure that companies get credit for as many of the good things they are doing as possible and may expose potential areas of abuse.

III. Global Health Impact (GHI) Labeling

One way of encouraging biotechnology and pharmaceutical companies to extend access to essential drugs and technologies to the poor with a rating system like that described above is to create a Global Health Impact (GHI) label that they can use on their products. For, then these companies will have an incentive to voluntarily use the label to garner a larger share of the market. If Wyeth, for example, was highly rated, Wyeth could use the GHI label on Advil. Wyeth would have an incentive to do so because consumers and doctors might, in some cases, prefer to purchase and prescribe GHI Advil over the alternative analgesics. If even a small percentage of consumers or doctors would prefer GHI products, the incentive to use this label for analgesics alone could be significant in this approximately two-billion dollar a year market. (Note: The top ten analgesic pills seem to capture between 2-14% of the market each and they are all available over the counter from Walgreens and other pharmacies).

It is worth exploring this option since it is similar to traditional Fair Trade campaigns, which have been quite successful. In 2000, European countries sold 27 million pounds of coffee worth more than 300 million dollars (Transfair, 2002; MaxHavelaar Belgium, 2002 cited in (Raynolds, 2002)). And it was sold in more than 35,000 super markets, as well as many universities and government offices. Fair Trade coffee sales amounted to about 1.2 percent of the European market (EFTA 2001 cited in (Raynolds, 2002)). In the US Fair Trade coffee grew by 79% in 2000-2001 and experts predict it will be the largest Fair Trade coffee market (McMahon, 2001 cited in (Raynolds, 2002)). About 50,000 retail outlets (97% of roasters) including Starbucks, Peets, and Green Mountain coffee sell Fair Trade certified coffee, even Exxon Mobile
sells the stuff ((Conroy 2001; TrasFair USA 2002) cited in (Raynolds, 2002)). And it is not just coffee. By 2007, Fair Trade certified sales were approximately €2.3 billion (FLO, 2009).

Of course, the GHI label is different in some ways from traditional Fair Trade labels. Traditionally, Fair Trade has focused on improving the lives of poor producers or workers. Fair Trade coffee, for instance, must be picked by harvesters who are paid a living wage. One can imagine a Fair Trade proposal along these lines that would reward companies that are doing a good job of producing drugs in developing countries (e.g. treating their employees well in the process). xxii That, however, is not the idea here. It is more similar to other certification schemas that try to prevent companies from employing certain kinds of workers. “Rugmark” and “Respect: Fair Trade Sports,” for example, focus on eliminating child-labor. xxiii For, here we are not concerned with production processes. We are considering how producers impact even those poor people they do not employ.

The proposal is, however, also similar to other successful labeling campaigns. Such campaigns include Buy Red and Buy Pink – for companies willing to donate a portion of the sale of a product to AIDS and breast cancer research. It also resembles the USDA Organic label, Leeds certification for green buildings, and FCS and Smart Wood Certified Forestry sustainable forestry labeling. Ethical consumption, supported by such campaigns, is generally on the rise. In the UK, for instance, expenditure on ethical goods and services in energy, housing, household goods, transportation, personal items, and subscriptions almost doubled between 2002-2007 (The Cooperative Bank, 2007).

Furthermore, there is reason to think that a GHI label, in particular, could create large incentives for positive change. The biggest pharmaceutical company, Pfizer, has revenues of about 48 billion dollars per year. xxiv But a quick web search suggests that at least three of the 23 companies producing the 26 orphan drugs with the most potential to benefit the poor only have revenues or sales between 1-10 million dollars a year. xxv One percent of the market in analgesics alone -- less than the percentage of the European market in coffee captured by Fair Trade coffee -- is twice the size of the revenue of these companies as 1% of the 2 billion dollar market is 20 million dollars. xxvi Markets for other pharmaceutical products are much larger. The US market for prescription allergy medicines in 2001 alone generated revenues of more than
$6.45 billion (1.7 billion came from over-the-counter allergy and asthma products before Claritin, Allegra, and Zyrtec were off prescription).  

Insurance companies might create additional incentives for companies to extend access to essential drugs and technologies to the poor. Both (public and private) insurance companies could create incentive for positive change by giving (some) preference to (otherwise equivalent) GHI drugs on their formularies. They might even be encouraged to do so if a similar rating system were designed to measure insurance companies’ impact.

Patients, doctors, and insurance companies will not always prefer GHI drugs and technologies. Sometimes there will be one medicine that is best for a particular condition in which case its GHI status may not matter. In many cases it would not even be a good idea for patients, doctors, or insurance companies to choose GHI products if they are not the best choice for a particular disease or disability.

Many drugs have equally good competitors, however. In 2006, 63% of all prescriptions were for generic drugs. When there is an equally good competitor for drugs under patents, patients, doctors, and insurance companies might take the ratings into account (Frank, 2007 cited in Kesselheim, 2008). Furthermore, many over-the-counter medications have equally good competitors. The market for over the counter medicines in 2004, alone, was US $16 billion (Mahecha, 2006). This market includes many drugs made by major pharmaceutical companies including Nicorette, Monistat, and Claritin that have reasonable competitors.

If generic companies were also rated (e.g. on the basis of their drug donation programs and charitable contributions) the potential impact of GHI labeling would be even larger. The market for generics was over 20 billion and consumers are often indifferent (or nearly indifferent) between generics and other medicines. So the fact that pharmacies usually do not carry more than one generic of the same molecule should provide no objection to this proposal (people might prefer a GHI certified generic medication to its patented competitors).

Both over-the-counter and generic markets are much larger than the market captured by almost all Fair Trade products (including coffee). So there is reason to believe GHI could have some impact. If consumption of GHI goods reached 1% of the market in over-the-counter and generic medications --
which, as we saw, is less than the amount of the market captured by Fair Trade coffee -- that would yield at
least 3.6 billion dollars worth of incentive for biotechnology and pharmaceutical companies to become GHI
certified.\textsuperscript{xxx} This number looks big enough to incentivize even Pfizer to do some good.

Finally, pharmaceutical companies make all kinds of products besides drugs – from diet drinks to
lotion and pet vitamins to mouth wash. Pfizer, for instance, makes parasiticides, anti-infectives, biologicals,
allergy, cancer, pain, metabolic disease, production, nutritionals, and food safety products \textit{for animals}.
Besides their pain management, dietary supplements, respiratory, topical, and GI medicines for people,
they have “a full line of infant formulas, follow-on formulas, growing-up milks, and prenatal and adult
supplements” (Pfizer, 2010). So, they could use the GHI label on these products too.

Having different (e.g. gold and silver star) labels might also help ensure that the GHI rating
system does not just “rubber stamp” what may be genuinely bad behavior on the part of biotechnology and
pharmaceutical companies.\textsuperscript{xxxi} (Initially, even the best companies might not be doing enough to extend
access to essential drugs and technologies to the poor.)

Even in the absence of a complete account of companies’ obligations or multiple labels, however,
a GHI rating agency can avoid condoning bad behavior in other ways. Just as it is possible to reward a
generally bad employee or child for doing something right, it is possible to reward a generally bad
company for good behavior. It is just essential that everyone utilizing the GHI label is clear about exactly
what it does and does not mean.

Although some companies may try to undercut the GHI label or game the system by, for instance,
lobbying the rating agency or creating counterfeit labels, there are also reasons for highly ranked
companies to support it. If the rating standards are transparent and simple, and consumers and health care
professionals are educated about the GHI label, it might be widely trusted and alternatives viewed with
suspicion. This seems to be the case with Fair Trade labels, for instance.\textsuperscript{xxxii} Governments might even
regulate use of the label as the US did, however imperfectly, with “Organic” labels.\textsuperscript{xxxiii}

\textbf{IV. GHI Licensing}

Having a GHI certification system for biotechnology and pharmaceutical companies would also
open the door to many other ways of incentivizing companies to extend access to essential drugs and
technologies to the poor. Activists who believe people have a human right to essential drugs and technologies might, for instance, organize boycotts of non-essential medicines produced by companies that are not GHI certified (just like animal rights advocates organized boycotts of tuna caught by companies that did not use dolphin safe nets). Alternately, socially responsible investment companies could include in their portfolio GHI companies. Such activism might positively impact the poor’s access to essential drugs and technologies.

GHI might even encourage new kinds of social activism. An organization along the lines of Universities Allied for Access to Essential Medicines (UAEM), which promotes licensing practices to help the poor, might create a campaign to get universities to develop “GHI licensing” policies. Alternately, the American Medical Student’s Association, which uses metrics to put pressure on pharmaceutical companies and universities to improve policies, might launch a GHI licensing campaign. Since UAEM has already had some success with getting universities to accept their (very important) Equitable Access License (i.e. open-access license), there is reason for optimism.

Pharmaceutical and biotechnology companies rely, to a large extent, on university research and development. Universities have developed many drugs and technologies including vaccines, tests for osteoporosis and breast cancer, and the “gene splicing technology that initiated the biotechnology industry” (AAU, 1998). Many big pharmaceutical companies license in or acquire a large percentage of their drugs (by, say, purchasing small biotech companies) from universities. In 2002, for example, Pfizer licensed in 30 percent of its drugs, and Merck 35 percent (Angell, 2007). All of Bristol-Myers Squibbs’ best selling drugs in 2003 were licensed (Harris, 2003). Pharmaceutical companies probably acquire even more of their most innovative drugs from universities. “Nearly all HIV/AIDS and cancer drugs are based on outside research -- most of which is university research sponsored by the NIH” (Angell, 2007). In 2000, a US Senate report found that federal funding supported the development of 15 of the 21 most important drugs.

On a conservative estimate, about a third of R&D is done by universities in high income countries. The percentage may be even greater as companies have a large incentive to over report R&D and include marketing costs as R&D.
This was not so a few years ago. In 1980, Congress passed the Bayh-Dole act which allowed universities to patent their research and to license it to third parties (CPT, 2005). Before the act was passed, universities received less than 250 patents a year. In 1996, universities received over 2,000 patents, “executed nearly 2,200 licensing agreements, and received royalty income from licensing of $242 million” (UAEM, 2007). Between 1980-2007, over 1,500 start-up companies were formed from academic research (UAEM, 2007). In 2005, there were at least 28,349 active licenses (AUTM, 2005, 14).

Furthermore, there is reason to believe pharmaceutical companies are coming to rely more and more on universities. Recently in-house pharmaceutical research has not been very productive (NIHCMF, 2002). In light of its dry pipeline, the pharmaceutical industry is “searching ever more desperately for drugs to license from small biotechnology companies and universities” (Angell, 2004, 236).

Because biotechnology and pharmaceutical companies depend to a great extent on university’s licenses, universities could, conceivably, influence these companies’ policies. If, for instance, universities’ licensing agreements required preferential treatment of companies that were highly rated, companies would have an incentive to meet GHI standards. Universities might adopt a GHI licensing policy voluntarily. Their technology transfer offices could agree to implement GHI licensing practices. At the University of Pittsburgh, for instance, the head of the Office of Technology Management has this
decision making capability. Though, he would probably also require the support of the chancellor if the policy negatively impacted the university’s ability to sell licenses (Vanegas, 2007). Depending on how the GHI standards are set, the policy might not negatively impact the sale of university licenses. At least it is worth carrying out the requisite econometric analysis to determine the likely impact on all of the relevant stake-holders (including universities and the poor).

Technology transfer offices already use some non-financial criteria when deciding to whom to license their products. The Bayh-Dole act encourages universities to license to small, US companies. Universities acquiesce without complaint. If the technology transfer offices at some universities are reluctant to sign on to voluntary programs, however, professors and researchers might have an impact because they sign agreements to allow universities to license patents resulting from research they create. Although some researchers at major universities receive industry funding, only 7% of university research is funded by industry. Pharmaceutical funding probably makes up only a portion of the total.

Universities might be receptive to the idea since:

…universities hold an avowed commitment to creating and disseminating knowledge for the public good, and they have pledged to see the technologies they develop deployed to benefit the world. Campus decision makers are insulated from lobbies that may dominate political arenas; they are expected to be responsive to students and faculty; and they operate in an environment where reasoned debate, not power, is expected to be the currency (UAEM, 2007).

As the Association of University Technology Managers put it, universities are not only concerned about monetary benefits but want the new drugs and technologies they develop to “be used to further the public good” (AUTM, 2005, 35).

Students could also encourage professors and universities to make the necessary revisions in the way that United Students against Sweat Shops (USAS) has helped convince campuses to buy “sweat-free” clothing made at factories approved by the Worker Rights Consortium and Universities Allied for Access to Essential Medicines has convinced universities to adopt Equitable Access (i.e. open access) licensing policies. If a GHI licensing campaign was only as successful as USAS’s campaign has been so far, this proposal could create 840 million dollars worth of incentive for pharmaceutical companies to become certified every year. That is about the cost of developing a new drug on the highest estimates. This
incentive might suffice to double the number of drugs produced for neglected diseases between in 1975-1999 in a similar time-frame.

V. Advantages of the GHI Proposals

GHI has some advantages over and avoids some of the problems with the main alternatives in the literature. One advantage is that the proposal might both help the poor access existing drugs and technologies and encourage research on and development of new drugs and technologies that benefit the poor. Most of the alternatives address only one of these problems. To see how GHI avoids some of the problems with the alternatives, let us consider first the shortcomings of several proposals that try to help the poor access existing drugs and technologies. Obviously, it is impossible to canvass every proposal in the literature here.iii There are many innovative licensing and intellectual property strategies (Abramowicz, 2003; Pharmaceutical R&D Policy Project, 2005; Faunce & F Nasu, 2008; Berndt et. al., 2007; Danzon & Towse, 2003; OHE Consulting, 2005). This section will consider just a few of the canonical alternatives.

One way of lowering the cost of existing drugs and technologies is via differential pricing (Danzon & Towse, 2003). Biotechnology and pharmaceutical companies might offer drugs at different prices for different markets (Flynn et. al., 2009). Another option is compulsory licensing. Countries can issue licenses to produce and/or import these products without approval by the company holding the patent. Yet a third way of lowering the cost of existing drugs and technologies is to repeal the World Trade Organization’s Trade Related Intellectual Property Rights Agreement (TRIPS) or, barring that, modify it to allow poor people to secure essential medicines at or below the marginal costs of production (Lanjouw & Jack, 2004).lv

Unfortunately, although companies do some differential pricing, they have also resisted differential pricing. lv They do not always have an incentive to lower their prices for the poor. It is hard to prevent re-importation of cheaper versions of identical-drugs across borders, even with different packaging. Companies might worry that biotechnology and pharmaceutical products are small and easy to hide. So it is not likely that they will pursue differential pricing to the extent required to protect global health.

Similarly, companies often resist compulsory licensing. When South Africa passed its Medicines Act, many of the big pharmaceutical companies sued because the act encouraged generic competition for
AIDS medicines (Banard, 2002; Reichman, 2009; Outterson, forthcoming). It was only after protracted negotiations, and a great deal of negative media attention, that the pharmaceutical companies withdrew their lawsuit. But South Africa did not go on to import generic AIDS medicines (Banard, 2002). At the behest of companies, other countries have been singled out in the 301 Reports of the US Trade Representative for not being aggressive enough in enforcing foreign intellectual property rights and have, thus, faced the threat of trade sanctions. The US has also used bilateral trade agreements and “diplomatic and political pressures to undermine countries that produce generic medicines and/or consider importing them” ((Oxfam, 2002 cited in (GHW, 2005, 106)).

Worse countries without their own manufacturing capacity may not be able to secure the drugs they need even if they do issue compulsory licenses (Banard, 2002). Few poor countries have their own manufacturing capacity and, under TRIPS, it may become more difficult for those without manufacturing capacity to access generic drugs (Barnard, 2002; Steinbrook, 2007). TRIPS requires countries like India, Brazil, and Thailand that export many generic drugs to developing countries to extend patent protection to essential drugs and technologies. Countries that want to export essential drugs and technologies will also have to issue compulsory licenses to do so. So far, only one country (Canada) has agreed to export drugs under a compulsory license (WTO, 2007). It issued a compulsory license to export TRIPVAR, an AIDS medication, to Rwanda (WTO, 2007). Though, given the complexity of international and Canadian law, Canada was yet to export a single pill three years after issuing the license (Goodwin, 2008).

Finally, there was a large social movement, backed even by the (then) Pope, to prevent implementation of the TRIPS agreement. Ultimately, it failed. Biotechnology and pharmaceutical companies want control over the drugs they develop in every market. So it is unlikely that we will be able to return to a pre-TRIPS situation or even modify the agreement substantially to reduce prices in poor countries (Drahos, 2002; Sell, 2003).

Alternatives to GHI that encourage R&D on essential drugs and medications for neglected diseases include prize funds and grants (Kremer & Glennerster, 2004; Fisher & Syed, Forthcoming; Outterson, 2006). Agencies or individuals might, for instance, agree to buy a certain number of doses from any company that develops a malaria vaccine at a set price. Alternately, foundations often give grants
for research on neglected diseases. The Gates’ Foundations recently partnered with Novartis to support testing of new antibiotics for TB, for instance (TB Alliance, 2006).

Neither alternative takes full advantage of the efficiency the free market offers. The agencies offering prize funds or grants have to decide what neglected diseases or problems they want to address and there may be better ways to help the poor. They also have to decide how much a given intervention is worth. “These decisions are likely to be associated with substantial inefficiencies due to incompetence, corruption, lobbying by companies and patient groups, and gaming” (Pogge, 2007).

Adian Hollis’ and Thomas Pogge’s alternative is to create a second (voluntary) patent system (Hollis & Pogge, 2008). Under this system, biotechnology and pharmaceutical companies would not be given a limited monopoly for their inventions. Rather, inventors would be rewarded based on how much their inventions contribute to ameliorating the GDB. Inventors would have an incentive to invest in whatever R&D, infrastructure improvements, pricing systems, or donation programs would make the most impact on the GDB. They might even price their drugs below the marginal costs of production to capture a greater reward from this alternative patent scheme. The scheme would give inventors an incentive to collaborate with, rather than protest against, generic companies, country governments, and non-governmental organizations trying to alleviate the GDB. If the design details are properly worked out, Hollis’ and Pogge’s patent system would not create an incentive for companies to prefer drugs that treat the chronic diseases or disorders of affluent patients. Rather, companies would have an incentive to invest in those drugs that prevent the most death and alleviate the most suffering. In earlier work, Pogge said that the “cost of the plan might peak at around $45-$90 billion. With all the world’s countries participating, $45 billion amounts to 0.1 percent and $90 billion to 0.2 percent of the global product” (Pogge, 2007). In the proposal developed with Hollis, they advance a revised estimate of $6 billion (Hollis & Pogge, 2008).

Hollis and Pogge’s proposal would avoid some of the problems with prize funds. To offer a prize, someone other than the inventors must decide what is worth doing. But the outside experts and bureaucrats do not know what can be done most efficiently with each company’s resources. On Hollis and Pogge’s proposal, companies would have a reason to invest in whatever research they believe will most cost-effectively reduce the GDB (Hollis & Pogge, 2008).
Unfortunately, Hollis and Pogge’s proposal may also have a few problems. First, it is not clear how we might attribute reductions in the GDB to an inventor’s efforts. Although a new drug or investment in infrastructure might help ameliorate a disease, things non-governmental organizations or other country governments are doing, independent of the investor, may contribute more. It is not clear how we can prevent investors from receiving undue credit and investors have incentive to claim credit where it is not due. Finally, their proposal is quite expensive and depends on the goodwill of developed country taxpayers or donors who have historically done little to help the global poor. Unless it is well funded, it will not generate a large enough incentive for companies to risk investing in new drugs and technologies.

There are probably ways of ameliorating the problems with some of the proposals we have canvassed, and each is likely to have some positive impact. Nevertheless, the GHI proposal we have sketched avoids some of these problems. First, many biotechnology and pharmaceutical companies have an incentive to support the GHI proposals while almost (if not) all companies lack the incentive to do enough differential pricing, and almost all have an incentive to resist compulsory licensing and a return to the pre-TRIPS situation. Second, GHI takes full advantage of the free-market’s efficiency. A GHI rating agency need not decide what diseases or problems companies should address, nor need it determine how much inventions are worth before they are created. Rather, a GHI rating agency would reward companies based on how much their inventions and investments actually help the poor. Third, the GHI rating system is output based and could be used to incentivize companies to not only do R&D on neglected diseases but to extend access on existing drugs and technologies to the poor. Fourth, it does not benefit companies that do not help the poor. Fifth, although the proposal is not as ambitious as Hollis’ and Pogge’s, it has the advantage of being practical and relatively low cost. Although it will cost something to administer a trademark like GHI, those costs are no where near US $45-90 billion (or even US $6 billion) (Hollis & Pogge, 2008)). The total revenue and support for Transfair USA, the primary Fair Trade labeling organization in the US, was US $5,570,933 in 2006 (Transfair, 2006, 36). So, a reasonable estimate for the costs of the proposal would be in the millions rather than billions. Finally, the case for GHI labeling and licensing campaigns does not depend on these proposals being better than the alternatives. If one had to choose, it might be better to implement Hollis’ and Pogge’s proposal or the UAEM campaign mentioned in
previous section, rather than the GHI labeling and licensing campaigns. Fortunately, however, there is no need to choose. The GHI proposals sketched above do not compete with any of the other proposals on the table. Rather, they can be used in conjunction with all of the proposals above to bring even greater benefits to the poor.

Even if the GHI proposals this paper has sketched have some advantages over some of the main competitors, however, they must also avoid “incompetence, corruption, lobbying by companies and patient groups, and gaming” (Pogge, 2007). So, it is worth considering whether this paper’s proposals can transcend these and related obstacles.

VI. Objections

First, one might argue that the opportunity costs of pursuing GHI proposals are too high. Perhaps there are better things biotechnology and pharmaceutical companies, universities, researchers, students, and consumers could be doing besides trying to extend access to essential drugs and technologies to the poor in the ways set out here. The greatest health problems facing the poor could not be ameliorated by better access to existing drugs and technologies or more research and development on diseases affecting the poor. War, natural disasters, dirty water, and inadequate food provide the biggest obstacles to health in developing countries. Prevention and poverty alleviation could do much more for the poor than pills. Some anti-retrovirals, for instance, do little for the poor in parts of Africa where people lack adequate nutrition without which the drugs are often ineffective (GHW, 2005). Perhaps biotechnology and pharmaceutical companies or universities should just donate a part of their budgets to charity organizations. Perhaps researchers should spend most of their time trying to find ways of dealing with wars and natural disasters or ameliorating poverty. Maybe students and consumers should advocate for these kinds of changes or go to work for humanitarian aid organizations.

There may certainly be better things agencies or individuals could do for the poor besides supporting GHI in biotechnology and pharmaceutical companies. But, what is best cannot be decided a priori. After all we may do the most good for the poor by encouraging companies to do more R&D to benefit the poor. GHI might lead companies to come up with new anti-retrovirals or treatment regimes that work in places like Africa. Even if there are other things that could, in principle, benefit the poor more,
there may be room for those with different interests and talents to take different approaches to ameliorating poverty. This proposal is also compatible with doing many other things to help the poor as well. So it may be acceptable to pursue the GHI proposals suggested here as long as we do these other things too. Universities, companies, and individuals might both donate to good charities and support GHI labeling and licensing campaigns. The best need not be the enemy of the good.

Companies might, however, use the fact that they are highly rated to distract the public from their generally poor behaviour in other arenas. Suppose, for instance, that another organization launched a campaign to get companies to stop fighting compulsory-licensing in developing countries by lobbying US trade-representatives. Companies might respond by holding a media event to promote their GHI status and undermine the campaign. Since companies control a lot of resources, they would probably win a battle in the press.

Companies hardly need a label, however, to hold a public relations event and undermine campaigns to get them to improve their practices. Companies can promote their charitable programs, or even start new programs to get good publicity. Those involved in the attempt to get pharmaceutical companies to improve their practices should not blame each other if companies abuse their efforts. Rather, they should stand together – those involved in the GHI movement might even create standards for revoking companies’ licenses if they insist on acting poorly. Although a rating system for pharmaceutical and biotechnology companies will not solve all the poor’s health problems, they may make a significant difference in many people’s lives.
Citations


Author. 2008a. Reference with-held.


Author. 2008c. Reference with-held.

Author. Forthcoming a. Reference with-held.

Author. Forthcoming b. Reference with-held.

Author. Forthcoming c. Reference with-held.


Chatherine Sinclair. 2009. Business development associate Transfair USA. Phone interview conducted by author. 8/13/09.


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The World Health Organization has compiled a list of “essential” medicines in part by considering the cost of securing these medicines. Here, however, I use the term only to indicate medicines that address dire health needs in poor countries, irrespective of the cost of addressing those needs. “This clarification should guard against the true but silly objection that monopoly prices barely impede access to essential drugs as listed by the WHO” (Pogge, 2007).

See, for instance: (Danzon et. al. 2003; Abramowicz, 2003; Trouiller et. al., 2001; Outterson, 2006; Hollis & Pogge, 2008). The World Health Organization has even convened an Intergovernmental Working Group (IGWG) the Secretariat on Public Health, Innovation and Intellectual Property to examine solutions to the second problem and create a global strategy to secure “needs-driven, essential health research and development relevant to diseases that disproportionately affect developing countries.” One option the Working Group supported that is not discussed in what follows but merits significant consideration is patent pools, though this will not address pricing issues (WHO, 2007).

Modified from (Access to Medicine, 2008).

This is akin to (Hubbard & Love, 2004) or (Hollis & Pogge, 2008). Different authors disagree about the merits of the available measures of an intervention’s impact. Some, for instance, prefer to measure an intervention’s impact on quality adjusted life years (QUALYs). Given this disagreement, a good rating agency should consider the merits of the different measures for the task at hand.

A rating agency might start by applying the rating system only to large companies.

Again, this information might be elicited from the companies as a condition of certification. The rating agency could also charge certification fees for advertising or rely on highly rated companies to do this advertising. It is important to minimize problematic incentives in rewarding charitable programs too.

On access and benefit sharing see (UNU_IAS, 2008). A good rating system need not measure every way in which companies can improve health in developing countries. Furthermore, the most weight should probably be given for activities for which biotechnology and pharmaceutical companies have primary responsibility. Still, biotechnology and pharmaceutical companies do invest in health infrastructure and rewarding them for these investments will help insure that they not only have incentives to cure illnesses but also to prevent them.

Parts of the Access to Medicines Index may be useful here. Though, as mentioned above, researchers should think carefully before using it. The process of creating a good index must be above reproach, transparent, and the end result must be meaningful.

Because it is not entirely clear how much incentive companies would have to become GHI certified initially, it would be a good idea to include some things companies can do relatively cheaply to improve their ratings (e.g. donation programs). That way the poor could reap some benefits even if the incentive is not sufficient to convince countries to invest the kinds of money they would need to invest to develop new drugs and technologies to benefit the poor.

To estimate companies’ contribution to improving poor people's access to existing drugs, this paper suggested that a rating agency look at how much good each company does for the poor with its approved and verifiable projects (e.g. health-related infrastructure improvements in developing countries). It may be hard to isolate and measure the impact of health projects. An agency would have to transparently and systematically determine how much different investments in approved health-projects help the poor. Perhaps the agency could induce companies to provide this information as a condition of certification. But, biotechnology and pharmaceutical companies would have reason to try to distort these estimates. So, one place to start would be to evaluate the 126 health partnerships the pharmaceutical industry reported to the International Federation of Pharmaceutical Manufacturers & Associations in 2006 which have been verified by researchers at the London School of Economics (GFHR, 2006).

More precisely, orphan drugs address rare diseases in the US. As the US Food and Drug Administration puts it, “…the term rare disease or condition means any disease or condition which (a) affects less than 200,000 persons in the US or (b) affects more than 200,000 persons in the US but for which there is no reasonable expectation that the cost of developing and making available in the US a drug for such disease or condition will be recovered from sales in the U.S. of such drug” (FDA, 2008).
xiv A rating agency might also want to provide more incentive for companies to develop drugs and technologies that will have a large impact on the poor even if they have a large market in developed countries. If so, the agency might also offer companies credit for producing drugs that address diseases on the WHO’s list neglected diseases.

xv Once the rating system is up and running, the agency could make it a condition of being GHI certified that companies provide verifiable data on the number of doses they sell by a particular date.

xvi The agency might also consider the problems associated with drugs and technologies in estimating their net benefits (e.g. some drugs have pretty bad side effects that should probably be taken into account, others require difficult to implement treatment regimes ).

xvii Taking into account companies’ size will allow new or very small companies making only a few drugs to compete for good ratings. A rating agency might only rate large companies, however, if that is the best way to incentivise new R &D on drugs and technologies for the poor.

xviii See, for instance: (Drummond et. al., 2005).

xix It is important to take the costs of government oversight into account, however, if it proves necessary.

xx In 1986, the market for pain relievers was 1.7 billion dollars. Ibuprofen pain relievers only captured nine percent of the market (New York Times, 1986). For statistics on Fair Trade coffee see: ((EFTA 2001) cited in (Raynolds, 2002)).


xxii There is some work on how to help companies in developing countries meet local health needs. See, for instance, the Innovation, Knowledge and Development Project at the Open University (IKD, 2009).

xxiii (Respect Fair Trade Sports, 2008).


xxv This list was selected by a panel of three experts in international health at the University of Pittsburgh Medical Center. Contact the author for further information. Revenue estimates were found here:

http://www.spoke.com/info/c494unR/BraintreeLaboratoriesInc,
http://www.jigsaw.com/id150236/aventis_hoechst_marion_roussel_company.xhtml,
http://www.jigsaw.com/id2028996/romark_laboratories_lc_company.xhtml

xxvi See XX.

xxvii (BBC Research, 2002; Kalorama Information, 2001).

xxviii Sometimes companies may not want to use a label on generic products if the would prefer their customers buy their higher priced brand name drugs. But they can choose to use the label only on their brand name products if that is the case.

xxix For statistics see: (Mullins et. al., 2000) and (The Economist, 2006).

xxx For statistics see: (Mullins et. al., 2000) and (The Economist, 2006).

xxxi Perhaps this consideration also tells in favor of a label that says something like Extending Access rather than GHI for companies that are just the best out of a bad lot. The GHI label might be reserved for companies that really are doing what they should.

xxii Transfair USA, for instance, has never had to take anyone to court for misusing their label, a conversation usually suffices to either get companies to stop using the label or adhere to their standards for certification (Sinclair 2009).

xxiii Some worry that the agriculture lobby succeeded in lowering standards for calling something “organic”. But, even if the standards are not quite as good as one might like, the USDA does oversee the use of the pesticides and other farming practices that motivated the organic movement in the first place (USDA, 2007).

xxiv Even the Norwegian government uses some socially responsible investment criteria in investing its pension funds (Follesdal, 2007).

xxv I have discussed the proposal with the director of UAEM and he expressed interest in considering the project at some point in the future (UAEM, 2009a).

xxvi (UAEM, 2009b).
One might get a sense of how much technology industry is licensing in by considering how much of the research going into its products is coming from universities. “The NIH had selected the five top-selling drugs in 1995 (Zantac, Zonirax, Capoten, Vasotec, and Prozac) and found that sixteen of the seventeen key scientific papers leading to their discovery and development came from outside the industry. (Eli Lilly had sponsored one of the four key studies leading to the development of Prozac.) Looking at all the relevant published research, not just at the key studies, only 15 percent came from industry, whereas 55 percent came from NIH-funded laboratories and 20 percent from foreign academic institutions” (DiMasi et. al., 2003) cited in (Angell, 2004, 65). Furthermore, “A recent study published in the journal of Health Affairs reported that, in 1998, only about 15 percent of the scientific articles cited in patent applications for clinical medicine came from industry research, while 54 percent came from academic centers, 13 percent from government, and the rest from various other public and nonprofit institutions. Remember that these are patent applications for all new drugs and medical innovations, not simply for those ultimately judged to be clinically important. Had the data been limited to major breakthrough drugs, the industry’s role would undoubtedly have been even smaller. An unpublished internal document produced by the NIH in February 2000, which was obtained by Public Citizen through the Freedom of Information Act, revealed similar percentages” (DiMasi et. al., 2003) cited in (Angell, 2004, 64).

University technology transfer yielded around $25 billion in 1996 (AAU, 1998).

On changing patterns in pharmaceutical company innovation see (NIHCMF, 2002).

These included captopril (Capoten), fluoxetine (Prozac), acyclovir (Zovirax), AZT, acyclovir, fluconazole (Diflucan), foscarnet (Foscavir), and ketoconazole (Nizoral). For more information see: (Joint Economic Committee, 2000).

Furthermore, a lot of funding for universities comes from government, so this graph probably understates the government’s role.

Modified from: (GFHR, 2006, 41).

The Stevenson-Wydler act similarly allowed NIH-funded research to be patented and then licensed to drug companies. The companies market the drugs and then sometimes patent them for other uses. If a similar campaign could get the NIH to deal only with highly-rated companies, this might help people access essential medicines and technologies as well. After all, the NIH has helped create essential drugs like AZT (which was developed by NIH in conjunction with Duke and then licensed to GlaxoSmithKline) (Angell, 2004, 57).

The Association of University Technology Managers licensing surveys provide information about almost 200 major universities’ budgets, research expenditures, and licensing agreements as well as other useful information. See: (AUTM, 2007).

Another point of contact between universities and companies is when companies want to do clinical and pre-clinical trials. Universities could require that any research funded by pharmaceutical and biotechnology companies, even if it does not result in university owned intellectual property, be done only in conjunction with GHI certified companies. This kind of policy, however, will probably not be accepted by university researchers whose careers depend on such research contracts.

Universities often create or license to start up companies that, being new, could not themselves be GHI certified. These companies test and develop products using university technology. Eventually these companies are sold or sell their technology to larger companies that could be GHI certified. So down-stream clauses in licensing contracts may be necessary and desirable.

The University of Pittsburgh’s Office of Technology Management alone generated 7.1 million dollars in revenue in 2007 in licensing revenue, equity cash-outs, legal fee reimbursements from licensees. Licensing revenue alone was 4.9 million dollars and its equity in the start up Novecea generated 92,000 dollars, finally its spinout Stentor Inc. was sold for 6.7 million dollars (OTM, 2007, 7-8).

About 20% of Stanford faculty members had industry funding in 2004. About 30% of Stanford’s faculty resided in the medical school (Delgado, 2005). Of course, not all of this funding would have been from pharmaceutical companies but pharmaceutical companies probably fund some non-medical faculty so it might be reasonable to suppose that 20% of the medical faculty had pharmaceutical funding at Stanford. If that is right, then about 7% of Stanford’s faculty were funded by pharmaceutical companies. Another way of getting at the proportion of industry funding from pharmaceutical companies is to suppose that the percentage of the

32
medical faculty at Stanford receiving industry funding is about the same as the percentage of medical faculty receiving industry funding on average. If it is, then 25% of medical faculty at Stanford had industry funding. Again, other industries may account for some of this funding but pharmaceutical companies may fund non-medical faculty as well. So it seems reasonable to conclude (again) that 7% of the Stanford faculty had pharmaceutical funding. Stanford, however, has a large medical school and most universities and colleges probably receive much less industry funding.

I (UAEM, 2009a). The moral justification for this campaign would probably differ from USAS’s since it is different to make goods that essentially and directly rely on the labor of the poor than to make goods that simply ignore the needs of the poor.

li This assumes 30% of pharmaceutical companies’ research is done at universities, so that similar success would ensure that at least 2% of the research funds benefit the poor. Since US academic centers spent over 42 billion dollars in R & D in 2005, 2% of 42 billion dollars is 840 million dollars a year (AUTM, 2007). As noted above, universities are only getting about 240 million a year from licenses but they get more from the biotechnology companies they create. For instance, “Columbia University, which patented the technology used in the manufacture of Epogen and Cerezyme, collected nearly $300 million in royalties from more than thirty biotechnology companies over the seventeen-year life of the patent” (Angell, 2004, 71). And some of this incentive would presumably come from other downstream companies too. How much incentive companies will have will depend on how much the universities are willing to demand.

lii This estimate assumes that 30 percent of the drugs these companies rely upon are coming from universities, and is in line with other authors’ estimates. Marcia Angell reports, for instance, that “In 2002, for example, Pfizer licensed in 30 percent of its drugs, and Merck 35 percent” (Angell, 2007). All of Bristol-Myers Squibbs’ best selling drugs in 2003 were licensed (Harris, 2003). Pharmaceutical companies probably acquire even more of their most innovative drugs from universities. For independent work suggesting R&D costs are much lower see: (Light et. al., 2009).

liii There are a host of alternatives in the interdisciplinary literature on the topic that merit consideration. Some suggest better prediction of demand for medicines for neglected diseases (Levine et. al., 2008). Others encourage developing countries to form alliances with each other and reform their patent offices (Yu, 2008; Drahos, 2008). Yet others, or endorse international organizations’ move towards promoting development (Lerner, 2008). Some even suggest changing university licensing practices to allow greater access to the fruits of university research (Evans, 2008).

liv Although intellectual property rights encourage the development of new drugs and technologies, these rights may also prevent the poorest from securing existing drugs and technologies. The TRIPS agreement requires WTO member countries to grant 20 year patent protection for new drugs and technologies. The so-called “TRIPS-Plus” provisions require countries to allow these patents to be “ever-greened” beyond the 20 year mark and discourage generic competition. Biotechnology and pharmaceutical companies can apply for patents on many “trivial or irrelevant” aspects of their drugs and technologies like packaging or dosing regimen to extend protection beyond the life of their primary patent. They must then be notified before generics can be produced and get an automatic 30-month extension on their patent. Sometimes they try to extend protection further with legal action. Often generic drugs must be tested again before being put on the market even if they are basically equivalent to patented versions. This expensive testing can delay generic entry into the market. See: (Federal Trade Commission, 2002), (Sell, 2004), (t’Hoen, 2002) and (NIHCMF, 2002).

lv See (Kanavos et al., 2004).

lvi “The combined worth of the world’s top five drug companies is twice the combined GNP of all Sub-Saharan Africa” (GHW, 2005, 103). In 2002 the 10 largest pharmaceutical companies made over $39 billion, more than half of the total profits of Fortune 500 companies. “With such profits at stake, it is no surprise Big Pharma invests a huge amount of money in protecting them” (GHW, 2005, 103).

lvii Similarily, when Thailand issued a compulsory license for Efavirenz an HIV/AIDS drug produced by Merck the US government was displeased. See (McDermott, 2006; Office of the US Trade Representative, 2007).

lviii For an account of Australia’s difficulties in extending access to essential drugs and technologies to its population under TRIPS see (GHW, 2005, 106).

lix The administrative burden of trying to issue a compulsory license may also provide a road block to doing so (GHW, 2005).
Ix See: (Martin, 2002).
Ix The agreement was amended to make it easier to compulsory license essential drugs and technologies (WTO, 2007).
Ixii A more recent alternative is another licensing and rating proposal – Universities Allied for Essential Medicines’ (UAEM) Equal Access License (EAL) and their metric for rating university technology transfer offices. UAEM’s proposals are promising and it is probably too soon to know if they will succeed. Their metric, however, looks only at technology transfer offices’ policies rather than the impact of these policies (UAEM, 2009a). While good policies probably promote good outcomes, it would be better to look at the impact these offices are having. The EAL license is also step in the right direction but may not do enough. It allows generic companies access to new research. It does nothing to help the poor secure access to existing drugs and technologies or encourage other biotechnology and pharmaceutical companies to do research on neglected diseases (UAEM, 2009b).
Ixiii Such alternatives may be more cost-effective than prize funds. With prize funds, the prizes have to be large enough to compensate for the risk to companies of not being able to develop an acceptable invention or not being the first to do so. See: (Kremer and Glennerster, 2004).
Ixiv A bidding system might provide a partial solution to this problem. On this see: (Pogge, 2007).
Ixv Hollis and Pogge’s proposal is similar in some ways to the proposal advanced in (Hubbard & Love, 2004). Hubbard and Love suggest separating out markets for R&D from markets for end products (putting the later in the public domain and funding the former through tax contributions).
Ixvi Pogge seems to think that this way of incentivizing companies to do new R&D will be less expensive than prize funds which have to come up with big enough prizes to compensate companies for not being the first to develop a new drug or technology. I do not see how this problem is not a general one for incentivizing companies to do new R&D. Presumably only one company can have a patent under Pogge’s schema for a particular condition, so companies have to take into account the risk of doing R&D on a condition but not being the company to get the patent before deciding whether or not to do the R&D.
Ixvii It is not clear that we ought, even on Pogge’s moral theory, to try to minimize the GDB rather than the disease burden of those our shared institutions have harmed (until everyone’s human rights are satisfied). It may be better to just try to aid the poor. Because this is a very complicated (and partly empirical) question I will not discuss this difference between our proposals further here.
Ixviii It is not at all clear how Pogge estimates his program’s cost but it might cost quite a bit more than he imagines to really make an impact as drug companies report average R&D costs in the hundreds of millions (Angell, 2004, 43).
Ixix A potential draw back is that the proposal’s success depends on what may be fickle and easily manipulated consumer preferences.
Ixx They have never even had a lawsuit in defense of their label though two people at the organization help prevent abuse by contacting those who infringe on their copyright they rely primarily upon their customer base for monitoring (Sinclair, 2009).