

September 8, 2000

To: Interested Colleagues

From: Lloyd Etheredge, International Scientific Networks Project, www.policyscience.net

Re: The UN Global Health Startup: Internet infrastructure and linkups for 10,000+ sites in 130 countries.

Earlier this week, at the Millennium Summit, Secretary-General Kofi Annan announced four new initiatives. They were not reported prominently in the US press, and I thought that you might be interested to know about the extraordinary new global Internet initiative, supported by a consortium of foundations and corporate partners, for health:

"As a concrete demonstration of how we can build bridges over digital divides, I am pleased to announce a new Health InterNetwork for developing countries. This network will establish and operate 10,000 on-line sites in hospitals, clinics and public health facilities throughout the developing world. It aims to provide access to relevant up-to-date health and medical information, tailored for specific countries or groups of countries. The equipment and Internet access, wireless where necessary, will be provided by a consortium led by the WebMD Foundation, in cooperation with other foundation and corporate partners. Training and capacity-building in developing countries is an integral part of the project. The World Health Organization is leading the United Nations side in developing this initiative with external partners, including the United Nations Foundation."

- Kofi Annan, 'We the Peoples' - The Role Of The United Nations In The 21st Century Millennium Report of the United Nations Secretary-General, September, 2000. www.un.org/millennium/sg/report

Announcement by the WebMD Foundation

Why Global Health Connectivity?

Ignorance. Indifference. Inaction. In a world where infectious disease epidemics, malnutrition, and poverty are commonplace, why bother with the Internet? In a world where there are insufficient hospitals, clinics, public health centers, well trained doctors and nurses, clean water and sterile syringes, a safe place and care for a mother to birth her baby, and inadequate food, drugs, or even livable space, is the Internet really relevant? When the bricks and mortar health care needs of much of the world's people have been shamefully neglected for decades, is not connectivity to the health Internet an inappropriate band aid at best - and a naïve, arrogant pretense at worst? With global population growth out of control, and with 80% of all new population increases expected in the poorest fifth of humanity - most of whom will likely not even be able to read, does a global

network of interacting computers, content, and functionality offer any meaningful value?

There can be no reasonable refutation of the facts which underlie these questions. Of course there are food, health care, clean water, literacy, and bricks and mortar needs in the developing world that are utterly and absolutely compelling, and of course, filling these needs must remain paramount in bridging the grotesque inequities that characterize our world at the beginning of this new millennium. Connecting the doctors, nurses, and public health workers serving the world's poorest people to the health Internet is no substitute for meeting the more elemental and fundamental needs of the world's poorest two-fifths.

But let us make no mistake about it - ignorance kills. It is the same world of inadequate bricks and mortar where people die or fall ill regularly from actions and behaviors which, if avoided, could prevent or lessen the severity of disease. This is true not just of illnesses where behaviors contribute to disease, such as smoking and AIDS, but others where personal behaviors are not the issue, such as prevention of insect-borne diseases through effective use of protective nets, micronutrient diseases through use of vitamin supplements, or of water-borne disease through improved water filtration and sanitation. It is even true of injuries (motor vehicle, home and work-related), perhaps the biggest killer in the world. For all of these public health problems, a knowledge-based system of intervention to change behavior, including and mediated through the Internet, could prove extremely valuable in terms of saving lives and reducing human misery.

One of the most pregnant questions on the minds of political leaders and international health and development professionals around the globe is "can the Internet accelerate socioeconomic and health development?" In countries like India, China, and Brazil, with rapidly emerging information technology industries and leaders, some assert that the Internet can fuel a kind of "leapfrog economic development" - advancing the developing world into greater equity with the industrialized North more rapidly and less painfully than anyone previously imagined possible.

This question is not far fetched. In an increasingly polluted and resource depleted world with 6 billion people today (and 9 billion by 2030), it is abundantly clear that we cannot bring the world's population into economic parity through the same development model used by the North in the 20th century. The top developmental fifth of the world's population got there employing a strategy industrially productive, yet highly resource consumptive and environmentally polluting. There is thus good reason to question whether the planet can livably sustain its projected population if the remaining four-fifths of humanity develops using the 20th century model. Our global circumstances demand that we assess and deploy every tool available or imaginable to foster leapfrog economic development to a global information economy that decreases the productive-polluting phase.

So what will be the contribution of the WebMD Foundation to the Internet-based global effort to reduce ignorance, indifference, and inaction and to facilitate development? In partnership with the United Nations and the World Health Organization, as well as other IT industry leaders, we will help the developing world build an international Internet network - an "InterNetwork" - for health information and communication. This InterNetwork will be a powerful two-way channel to

communicate much needed health and medical information within and to the poorest communities around the globe, and to capture essential health information and data for leading local, national, and international health institutions. It will be entirely non-commercial and non-profit. With our United Nations partners, and involving many developing world collaborators, we will lead a philanthropic consortium to create an unprecedented public-private partnership to build this critical global health communications vehicle. We fill the InterNetwork infrastructure with content and applications that are culturally, technologically, and socioeconomically appropriate to (and co-created by) the end users in the developing world. The potential public health and medical value of this system not only to the developing world, but to all of humanity at large, is limited only by the constraints on our imagination. The InterNetwork will:

- create a dynamic, continually refreshed global continuing medical and public health education system;
- assist countries in accelerated and accurate identification of critical health problems - and solutions - and facilitate the communication of these within and across national borders;
- strengthen local public health and health information technology infrastructure, and build capacity to meet local health communication and information needs;
- advance scientific understanding of the origins, best treatment and prevention of disease;
- function as a detection system for otherwise missed innovations in therapeutics and prevention arising from traditional indigenous, folkloric, and alternative medical systems;
- deploy powerful and effective tools to help community health practitioners, policy makers, and clinicians engage high impact disease prevention, health education, and behavior change techniques;
- disseminate state of the art tools for strategic health care management to improve the quality and reduce inefficiencies and waste in the delivery of health services;
- capture health data and facilitate disease and risk surveillance for: routine, emerging, and epidemic infectious diseases; environmental health threats; chronic disease and behavioral risk factors; tracking immunizations, micronutrient supplementation, and other public health interventions; and the evaluation of population health, nutrition, and child survival outcomes;
- contribute to monitoring the now well understood antecedents of outbreaks of mass violence or genocide.

The InterNetwork will start by establishing 100 Internet health access sites (telephonic and wireless) in each of the 130 poorest nations on the globe - effectively the entire developing world. Doctors, nurses, and the public at these 13,000 sites around the globe will have routine and sustainable access to customized, useful, and appropriate state of the art public health and medical information, regardless of technological or infrastructure barriers. That is our current commitment.

In future years, we will seek to build out the number of sites in nations with large populations

where the initial 100 provided is clearly insufficient. Within 5 years, we will begin the process of transferring this sustainable infrastructure to local control, ownership, and responsibility.

The Health Information InterNetwork for Developing Nations will revolutionize global health communications as we know them. It will greatly empower local health professionals and enrich the public, expanding and enhancing public health and medical knowledge, and advancing education and practice. It will improve the health status and health outcomes of people across the developing world.

In the end, however, leaving aside the public health and international development value of global connectivity, the bottom line when it comes to Internet access for the developing world relates to the issue of equity. Leaving aside the tangible, real world benefits of health connectivity and the transformative potential of the Internet on global economic development, wiring the developing world to the Internet is at its heart a question of leveling rather than further polarizing the cognitive playing field of the world. What we're really talking about here is global knowledge equity - and knowledge is power. We're talking about giving all people - white and non-white, North and South, rich and poor, male and female - access to the same global knowledge treasure house. Internet connectivity involves extending the most fundamental human rights of personal freedom, political liberty, and true and full participation and citizenship in a global knowledge democracy.

Those of us nurtured on the pop culture utopianism of science fiction classics such as Roddenberry's Star Trek need to be particularly careful of a susceptibility to viewing technological advancement as a substitute or catalyst for the progress of our global civilization. We know too well from history that technological advancement feeds the darkest recesses of the human heart just as it does our noblest aspirations. Nonetheless like many of my generation, I am drawn to the optimism of this utopian technological future where Russians, Americans, Asians, Africans, and the whole human family are not only colleagues, but cherished friends and seekers deploying science and technology on a path towards truth. And always, the question remains "but how do we actually get there?" Perhaps one of the most compelling things about the Internet to many of us, beyond its sheer inherent power, is a notion that maybe, just maybe, here is the seed for that profound transformation of our civilization.

Voltaire observed that God is a comedian playing to an audience that is afraid to laugh. The Internet - the greatest catalyst for wealth generation and economic polarization in the history of humankind - as a real solution to global equity and inclusive socioeconomic development? Who knows? I expect that we will all be laughing in 30 years.

- George A. Gellert, MD, MPH, MPA
President and Chief Executive Officer
The WebMD Foundation
<http://www.webmdfoundation.org/PresMessage.html>