HISTORICAL NOTES Does it Work? Assessing Technology in Health Care

Health care in the United States is caught in a self-reinforcing cycle of escalating costs, unaffordable care, rising numbers of uninsured, and greater reliance on late and intensive care, which in turn propels the inflationary spiral (1). The result is that calls for universal health coverage on the part of policymakers are accompanied by measures aimed at getting a handle on costs.

Aware that rising costs are being driven by expensive care of dubious efficacy, there is a growing consensus that the US has to do a better job of monitoring technology and innovative practices to determine which services actually work and which therapies are more effective than others in addressing a given condition. The expectation is that this process, known as comparative effectiveness research, would identify best practices and inform decisions on medical coverage and payment. As a result, any health plan would pay only for those treatments, drugs, or devices found to be more effective for a given patient vis-à-vis other options. The logic behind this is so clear that the obvious question is: Why has this not been done before?

The short answer is: It has. Between 1972 and 1995 the US had an Office of Technology Assessment (OTA) whose mandate was to "provide early indications of the probable beneficial and adverse impacts of the applications of technology" (2). Reporting to Congress, the agency was designed to give the legislative branch the tools it needed for the independent evaluation of national policy in a wide number of areas, including health, agriculture, transportation, energy, and the environment, among others. Once enacted, OTA's mandate broadened and became increasingly problem-oriented (3). Its agenda was driven by Congressional priorities; its reports clearly reflected the issues that legislators were addressing at any given time.

The agency began operating in 1974 and quickly established itself as a valuable adjunct to the decisionmaking process. Each assessment included the convening of an advisory panel, an in-house research team, workshops with experts and stakeholders, extensive peer review of drafts, and delivery of reports through congressional hearings, briefings, and public releases (3). Models of clear thinking and clean writing, OTA reports gathered, summarized, and translated technical issues in ways that were intelligible to the public. Because of the political environment in which it operated, OTA did not draw conclusions; rather, it presented the facts, distilled problems and alternatives, and discussed the pros and cons of different courses of action (4). OTA reports thus framed issues so that debates could proceed from a consistent knowledge base and set of facts. The agency therefore earned high marks from the press. The Washington Post characterized it as "a dispassionate, nonpartisan player in the legislative process." The Washington Times described it as "the voice of authority in a city inundated with statistics and technical gobbledygook" (4).

While health was only a fraction of its complete portfolio, the agency tackled a number of technological issues related to the efficacy of services. These ranged from artificial insemination to wheelchairs, and included cost-benefit analyses of cholesterol screening, risks and benefits of artificial hearts, and the effectiveness of AIDS prevention strategies, among many others. The result was a vast literature that addressed many aspects of health care and created both better-informed policy-makers and a more aware public.

OTA's usefulness, however, did not insure its survival. While it had some important allies in Congress and had gained an international reputation, OTA was ultimately trampled in a "political stampede on the Hill to downsize and streamline" (5). Its relatively small size, which made it efficient and nimble, facilitated its downfall. In addition, some of OTA's key supporters failed to show up or file proxies when the agency's survival was at stake. In the words of M. Granger Morgan, professor and head of the Department of Engineering and Public Policy at Carnegie Mellon, "Through a comedy of errors, oversight, and political machismo, Congress [chose] ignorance and ended the 23-year history of its best and smallest agency" (4). More simply, Chris Mooney described Congress as having performed "a stunning act of self-lobotomy" (5).

The end of OTA ushered in an era in which Congress often operated with unreliable data and great uncertainty when passing legislation related to science and technology. This in turn fostered the politicizing of scientific facts, and the promotion of what has been called "faith-based science" on issues ranging from individual contraception to global warming. Reversing this trend will require recapturing OTA's analytical capabilities, modus operandi, and significant legacy. But this is essential if health decisions are to be informed as to best practices, and if technology assessment and effectiveness PRHSJ Vol. 28 No. 3 September, 2009

research are once again to be part of the craft of health care policy-making.

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