





POLICY RESPONSES TO THE GROWING THREAT OF ANTIBIOTIC RESISTANCE

POLICY BRIEF 9 MAY 2010

THE INTERAGENCY TASK FORCE ON ANTIMICROBIAL RESISTANCE: 10 YEARS OF COORDINATED FEDERAL ACTION

Infections caused by antibiotic-resistant bacteria pose pose a growing public health threat. Federal agencies play a variety of roles in supporting and protecting the optimal use of drugs and other antimicrobial products. For example, the National Institutes of Health (NIH)

support research to develop new antimicrobial products. Once developed, the Food and Drug Administration (FDA) approves them for marketing and sale. The United States Department of Agriculture (USDA) oversees their agricultural use. The Centers for Disease Control and Prevention (CDC) engage in public education campaigns to inform doctors and consumers how the drugs should be appropriately utilized in humans. The Centers for Medicare and Medicaid Services (CMS) determine reimbursement for antimicrobials consumed by most of the country's poor, elderly, and disabled people. The Department of Veterans Affairs (VA) determines how they are used in the system's 153 medical centers. The Department of Defense (DoD) considers questions of antimicrobial resistance in light of potential bio-threats.

The federal government has a responsibility to act, but without anyone clearly positioned to lead federal programs to combat antimicrobial resistance it is nearly impossible for all of these different actors to coordinate their activities to create a systematic national response.

In light of this leadership vacuum, the Interagency Task Force on Antimicrobial Resistance (ITFAR) was created in 1999 to bring together 10 of the federal agencies working on issues related to resistance (see Box 1). An 11th organization—the United States Agency for International Development (USAID) has since joined. The task force has successfully documented progress on federal antimicrobial resistance-related projects and increased communication both within the agencies and between the agencies and external partners.

ITFAR is uniquely positioned to direct and support the federal response to antimicrobial resistance, but in its first 10 years the task force has done little to shape federal action.

Origins of ITFAR

The Interagency Task Force on Antimicrobial Resistance began in the midst of increased congressional interest on the subject. In December 1998, Senators Bill Frist and Ted Kennedy hosted a forum to investigate the problem of resistance and identify potential solutions. The discussion at the forum continued two months later at a formal hearing on antimicrobial resistance before the Senate's Committee on Health, Education, Labor and Pension's subcommittee on public health.

Further congressional action on the problem of antimicrobial resistance did not come for another year and a half. In June 2000, Senator Frist introduced The Public Health Threats and Emergencies Act.

Box 1. ITFAR consists of representative from 11 federal agencies.

- Centers for Disease Control and Prevention (co-chair)
- Food and Drug Administration (co-chair)
- National Institutes of Health (co-chair)
- Agency for Healthcare Research and Quality
- Centers for Medicare and Medicaid Services
- Department of Agriculture
- Department of Defense
- Department of Veterans Affairs
- Environmental Protection Agency
- Health Resources and Services Administration
- United States Agency for International Development*

*Not an original member of the task force.







The bill established a task force to coordinate federal agencies' actions related to antimicrobial resistance and develop a strategic plan for tackling the problem. It also authorized appropriations for the task force and related activities for six years and established funding for grants to state and local public health agencies and demonstration projects at healthcare facilities. The text of this bill and its later House version was incorporated into H.R. 2498, the Public Health Improvement Act, which was signed into law November 13, 2000.

By the time Congress formally established a task force on antimicrobial resistance, ITFAR had already been operating for over a year. Consisting of representatives from relevant government agencies (see Box 1), ITFAR's first public meeting was held in Atlanta on July 19–21, 1999. Task force members met with around 100 invited consultants to discuss issues related to antimicrobial resistance and potential federal action. Discussion centered around four areas of interest: surveillance, prevention and control, research, and product development.

A Public Health Action Plan

ITFAR used the discussion at its first public meeting as the foundation for its draft federal action plan, which it made available for public comment in June 2000. The task force released the final version, *A Public Health Action Plan to Combat Antimicrobial Resistance Part 1: Domestic Issues* in 2001. A second part focusing on international issues was originally planned and a smaller meeting with consultants was held September 26, 2002 to begin formulating it, but the global strategic plan was never developed.

ITFAR's hallmark document—A Public Health Action Plan to Combat Antimicrobial Resistance Part I: Domestic Issues—is divided into the four original categories: surveillance, prevention and control, research, and product development. The plan identifies 84 total action items related to these areas. For each action item, the document indicates the lead agency or agencies and the other ITFAR members involved.

Box 2: ITFAR's 2007 annual report identified ten priority action items.

Surveillance

- With partners, design and implement a national antimicrobial surveillance plan (Action Item #2).
- Develop and implement procedures for monitoring antimicrobial use in human medicine, agriculture, veterinary medicine, and consumer products (Action Item #5).

Prevention and Control

- Conduct a public health education campaign to promote appropriate antimicrobial use as a national health priority. The health campaign should involve many partners (Action Item #25).
- In collaboration with many partners, develop and facilitate the implementation of educational and behavioral interventions that will assist clinicians in appropriate antimicrobial prescribing (Action Item #26).
- Evaluate the effectiveness (including cost-effectiveness) of current and novel infection-control practices for health care and extended care settings and in the community. Promote adherence to practices proven to be effective (Action Item #39).
- In consultation with stakeholders, refine and implement the proposed FDA framework for approving new antimicrobial drugs for use in food-animal production and, when appropriate, for re-evaluating currently approved veterinary antimicrobial drugs (Action Item #58).
- Support demonstration projects to evaluate comprehensive strategies that use multiple interventions to promote drug use and reduce infection rates (Action Item #63).

Research

- In consultation with academia and the private sector, identify and conduct human clinical studies addressing antimicrobial resistance issues of public health significance that are unlikely to be studied in the private sector (Action Item #75).
- Identify, develop, test, and evaluate new rapid diagnostic methods for human and veterinary uses with partners, including academia and the private sector. Such methods should be accurate, affordable, and easily implemented in routine clinical settings (Action Item #76).

Product Development

- Identify ways (e.g., financial and/or other incentives or investments) to promote the development and/or appropriate use of priority of antimicrobial products, such as novel compounds and approaches, for human and veterinary medicine for which market incentives are inadequate (Action Item #80).



Because implementing some of the proposals required regulatory changes, additional financial and human resources, and statutory authority not available at the time, implementing the action plan was intended to be an incremental process. To guide the early stages of implementation, the plan outlined 13 action items the task force considered "top priority." The original list of priority action items was amended slightly in the subsequent annual progress reports, and only 10 items received this designation in 2007 (see Box 2).

To update the general public, interested consultants, and the agencies themselves on the progress of implementing the proposed course of action, ITFAR has released annual reports for 2001 through 2008. Release of these reports has coincided with the National Foundation for Infectious Diseases' (NFID) Annual Conference on Antimicrobial Resistance, which concludes with a presentation from the task force and an opportunity for public comment. The reports, organized by action item, include a comprehensive list of all projects undertaken at each of ITFAR's member agencies. The draft 2008 inventory of projects, released in February 2010, details almost 300 new and ongoing projects and meetings related to the action items.² Projects are housed in all 11 member agencies and run the gamut from organizing public education campaigns to supporting novel biomedical research.

The annual inventory of federal projects released by the task force is a useful resource. It can inform the staff of any project in any agency about similar activities occurring throughout the federal government. But more action is needed to sufficiently promote the strong, coordinated federal response the scope of the problem demands.

ITFAR's Future

ITFAR's agencies have spent over two years revising their antimicrobial resistance action plan. A meeting with over 50 consultants from the United States and 6 other nations was held December 12–13, 2007. Fred Tenover, the former CDC representative to the task force, has said that in providing comments for the revised action plan, consultants focused on a 3 to 5 year timeframe, listing milestones and metrics as needed. Unlike the first action plan, consultants were not told to focus exclusively on domestic actions and issues. He also said that the updated plan is being reframed in a more action-oriented manner.³ The CDC

reports that the new action plan is to be organized around 5 focus areas:⁴

- 1. reducing inappropriate antimicrobial use,
- reducing the spread of antimicrobial resistant microorganisms in institutions, communities, and agriculture,
- enhancing laboratory capacity to detect resistant microorganisms,
- 4. encouraging the development of new anti-infective products, vaccines, and adjunct therapies, and
- supporting basic research on antimicrobial resistance.

At the June 2008 public ITFAR meeting, Tenover suggested a draft of the revised action plan would be released in early fall 2008, with the final version prepared by early 2009. At the February 2010 ITFAR meeting, however, a draft was still not available for public comment and Edward Cox, an ITFAR co-chair and director of the FDA's Office of Antimicrobial Products, announced that the final draft was "still a ways away." He said that feedback about benchmarks and milestones has led to additional revisions, and a draft has yet to circulate among ITFAR's member agencies for feedback, the first step on its path to clearance for public release.

Incorporating benchmarks into the new plan is an improvement that can help the agencies prioritize action, but the revised action plan still needs to be released for public comment as soon as possible. ITFAR needs to finalize the new action plan before the issues identified two and a half years ago become dated.

The task force would be an ideal body to craft strategy, guiding instead of merely documenting federal action on antimicrobial resistance. However, it has largely left that role untouched. The annual meeting at the conclusion of the NFID conference is an ideal setting for the task force to become more proactive. It is the only formal face-to-face meeting of task force members, and the only time it consistently seeks public feedback. However, task force members are strapped for time and resources and do not make these meetings a priority; only three task force members were present at the February 2010 public meeting.⁶ The ITFAR meetings also do not provide an opportunity for dynamic decisionmaking and priority setting. Agencies announce what was done but do not discuss what should come next. In addition to discussing the successes of the past

year, this meeting should include updating the action plan and list of priority items based on newly developed products, recent scientific developments, lessons learned about what projects are feasible, and an improved understanding of emerging threats and other changing priorities. This will help ensure the agencies continually work together on the most urgent goals.

Solutions

ITFAR would also be strengthened by the creation of a full-time director's position, someone who could focus solely on leading and coordinating the task force, a provision included in the proposed Strategies to Address Antimicrobial Resistance Act (H.R. 2400). ITFAR is led by three co-chairs, each of whom also oversees offices in member agencies. While these cochairs are committed to the work of ITFAR, they are stretched for time. A dedicated director focusing 100 percent on promoting the task force could provide leadership, improve coordination, and bolster the commitment of ITFAR's members. The director could also serve as the task force's liaison to nongovernmental partners, strengthening ITFAR's communication of its work and increasing its ability to receive and benefit from external input.

ITFAR is uniquely positioned to coordinate a strong federal response to the growing public health threat of antimicrobial resistance. With dedicated leadership and renewed focus on the strategies spelled out in its action plan, ITFAR could more effectively harness the strengths of its member agencies in combating this threat.

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