Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

The NIH Consensus Development Program

Dissemination of Findings through Medical School Continuing Education Activities

February 1994

OFFICE OF INSPECTOR GENERAL

The mission of the Office of Inspector General (OIG), as mandated by Public Law 95-452, as amended, is to protect the integrity of the Department of Health and Human Services' (HHS) programs as well as the health and welfare of beneficiaries served by those programs. This statutory mission is carried out through a nationwide network of audits, investigations, and inspections conducted by three OIG operating components: the Office of Audit Services, the Office of Investigations, and the Office of Evaluation and Inspections. The OIG also informs the Secretary of HHS of program, and management problems, and recommends courses to correct them.

OFFICE OF AUDIT SERVICES

The OIG's Office of Audit Services (OAS) provides all auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations in order to reduce waste, abuse, and mismanagement and to promote economy and efficiency throughout the Department.

OFFICE OF INVESTIGATIONS

The OIG's Office of Investigations (OI) conducts criminal, civil, and administrative investigations of allegations of wrongdoing in HHS programs or to HHS beneficiaries and of unjust enrichment by providers. The investigative efforts of OI lead to criminal convictions, administrative sanctions, or civil money penalties. The OI also oversees State Medicaid fraud control units which investigate and prosecute fraud and patient abuse in the Medicaid program.

OFFICE OF EVALUATION AND INSPECTIONS

The OIG's Office of Evaluation and Inspections (OEI) conducts short-term management and program evaluations (called inspections) that focus on issues of concern to the Department, the Congress, and the public. The findings and recommendations contained in these inspection reports generate rapid, accurate, and up-to-date information on the efficiency, vulnerability, and effectiveness of departmental programs. This report was prepared in the Boston regional office under the direction of Mark R. Yessian, Ph.D., Regional Inspector General and Martha B. Kvaal, Deputy Regional Inspector General. Project staff:

REGION

Dana Miller, *Project Leader*
Timothy Corbett, *Lead Analyst*

HEADQUARTERS

Mary Beth Clarke, *Program Specialist*

For additional copies of this report, please contact the Boston regional office by telephone at (617) 565-1050, or by Fax at (617) 565-3751.

Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

The NIH Consensus Development Program

Dissemination of Findings through Medical School Continuing Education Activities

February 1994 OEI-01-91-01760

EXECUTIVE SUMMARY

PURPOSE

To evaluate the impact of the efforts of the National Institutes of Health to disseminate Consensus Development Program information through medical school continuing education activities.

BACKGROUND

In response to growing concerns about the effectiveness of some medical procedures and variations in medical practice, the National Institutes of Health (NIH) created the Consensus Development Program (CDP) in 1977. The Program brings together non-governmental panels to assess the safety, efficacy, and appropriateness of existing and emerging medical technologies. Each panel presents its conclusions in the form of a Consensus Statement, which is widely disseminated by NIH to medical professionals and the public through direct mailings, publication in journals, and other methods.

The potential importance of the Consensus Program has increased as concerns about cost and quality in health care have intensified. Recent evaluations, however, have pointed out potential vulnerabilities in the Program--including questions about its success in disseminating Conference findings. A 1989 Rand report suggested that continuing medical education (CME) activities could be a "critical dissemination vehicle," and recommended that a survey of directors of continuing education regarding the use of information from the Consensus Program would be valuable.

We conducted such an examination of continuing education programs at U.S. medical schools, which represent a major resource for CME. This report is based primarily upon a survey of continuing education directors and chairs of departments of family medicine, neurology, and oncology at all U.S. medical schools. We inquired about general familiarity with the Consensus Program, awareness of specific Statements, use of Consensus information in continuing education activities, and opinions about the Program. We did not attempt to assess changes in medical practice resulting from either continuing education activities or the Consensus Program itself.

FINDINGS

Fifty-two percent of medical school department chairs reported having sponsored a continuing education activity that addressed the findings of a recent NIH Consensus Conference.

- Chairs of family medicine reported more limited use of CDP information in continuing education activities than did chairs of neurology or oncology: 30 percent of family medicine chairs, 47 percent of neurology chairs, and 77 percent of oncology chairs reported such use.

- NIH Consensus findings have been addressed in a variety of medical school continuing education formats; the most common have been grand rounds.

- Of those department chairs who reported use of NIH Consensus information in their continuing education activities, 81 percent reported that these were targeted to in-house faculty, and 72 percent that these were targeted to practicing physicians from outside the medical school setting.

Several factors hinder wider dissemination and acceptance of CDP information and incorporation of that information into continuing education activities.

- Limited familiarity with the Consensus Development Program. Sixteen percent of department chairs knew nothing about the CDP; an additional 17 percent were aware of the Program but knew little about it. Family medicine chairs reported particularly limited familiarity with the Program: 27 percent had never heard of it and another 25 percent were aware but knew little about it.

- Unsuitable format of the Consensus Statements for continuing education activities. Only 33 percent of those department chairs who were familiar with the CDP rated the format in which Conference findings are presented as very appropriate for continuing education. Respondents suggested several types of materials that would more readily facilitate the use of Conference findings in their continuing education activities, including slides, overheads, and curriculum materials for short, small-group activities.

- Concerns about the Consensus Development Program itself. Most medical school department chairs voiced general respect for the Program. Nevertheless, a number of specific concerns were voiced by respondents familiar with the Program about limitations to its effectiveness and usefulness, including questions about the appropriateness of panelists and speakers, the practicality and directiveness of the Statements, and the adequacy of CDP procedures. A few respondents expressed fundamental objections to the use of consensus methods to address controversies in medicine. These concerns, whether reflective of perceived or actual weaknesses in the CDP, represent a serious barrier to wider dissemination and acceptance of NIH Consensus findings.

RECOMMENDATIONS

The NIH has demonstrated a firm commitment to ongoing evaluation and improvement of the Consensus Development Program. As NIH continues such efforts, it should aim to maximize the potential for medical school continuing education as a vehicle for disseminating Consensus findings. In particular:

The NIH should take steps to increase awareness of the CDP among those responsible for continuing medical education. The NIH should make special efforts to reach those who sponsor continuing education activities for general and family physicians.

In this effort, NIH should maximize the effectiveness of direct-mailing efforts by tailoring such mailings to department chairs and continuing education directors in their capacity as *educators*, and by encouraging them to cover Consensus findings in their continuing education activities. The NIH should work with medical school continuing education organizers to plan appropriate dissemination strategies. In this effort, NIH could also work with organizations other than medical schools, including relevant specialty societies and academic groups.

The NIH should identify more effective ways of encouraging the incorporation of Consensus findings into continuing education activities.

The NIH should explore ways of packaging and disseminating Consensus findings that would more readily facilitate their use in continuing education activities, including the production of slides, overheads, or other curriculum materials. The NIH should also conduct focus-group discussions with key audiences of Consensus findings, including medical school department chairs and continuing education directors, to learn their perspectives on format issues. The NIH could use its future research efforts as opportunities to examine the attitudes and practices of other types of continuing education sponsors.

The NIH should strengthen its efforts to understand and address basic concerns about the Consensus Development Program.

Because no dissemination efforts will be successful in reaching and influencing people with basic concerns about the effectiveness and usefulness of the Program's methods, NIH should strengthen its efforts to understand and address such concerns. The NIH could use focus groups or informal working groups of department chairs and continuing education directors, and other key audiences, to learn about and address these concerns. As first steps, NIH should identify and test better ways of involving a wider range of people in the planning stage of upcoming Consensus Conferences to maximize acceptance of the outcomes, and should address concerns about panel and speaker selection.

AGENCY COMMENTS

We solicited and received comments on a draft of this report from the Public Health Service (PHS). The PHS concurred with our recommendations and identified several activities that NIH currently has underway or has planned that address these issues. These include the publication of a revised statement of operating guidelines and procedures, efforts to identify new ways of exploiting CME as an avenue for dissemination, and continuing evaluation of the procedures and impact of the CDP.

The PHS also suggested that criticisms of the Consensus Program by some survey respondents may be based on incomplete or out-of-date information. We continue to believe that these concerns merit serious attention by NIH, and have modified the text to put these issues into clearer perspective. The complete text of the PHS comments appears in appendix E.

TABLE OF CONTENTS

INTRODUCTION

PURPOSE

To evaluate the impact of the efforts of the National Institutes of Health to disseminate Consensus Development Program information through medical school continuing education activities.

BACKGROUND

Health-care technology assessment and NIH

In recent years, health-care providers, policy makers, and the public have expressed increasing concern about rising costs, variations in medical practice, and overuse of certain medical procedures. These concerns have spurred greater interest in the evaluation of the appropriateness and effectiveness of existing and emerging health-care technologies, including drugs, devices, and procedures.

The Congress determined in the late 1970's that the National Institutes of Health (NIH), as the principal biomedical research institution in the nation, should play a role in this arena. The NIH director at the time testified that "NIH and the rest of the scientific community must assume more responsibility for the effect of research on the quality of health care delivered. The need for accelerating the transfer of new technology across the 'interface' between biomedical research and the health care community and systems is a major issue."[1]

The Consensus Development Program

The Consensus Development Program (CDP) was created as the focus of NIH's technology assessment efforts. The CDP aims "to promote the timely incorporation of beneficial medical innovations into clinical practice, encourage the abandonment of obsolete technologies in favor of ones that are more efficacious or safe, discourage the adoption of technologies that have little value, and form public policy choices that encourage or discourage the use of certain medical technologies."[2]

The Consensus Program employs a group-judgment process that brings together non-governmental panels to address the safety and efficacy of controversial existing or emerging medical technologies.[3] At the end of each 2-1/2 day Consensus Conference, the panel crafts a Consensus Statement presenting its findings and conclusions.

Reaching doctors: Dissemination of CDP information

The NIH aims to disseminate each Consensus Statement widely in order to achieve the "maximum impact of the Statement on health care practice."[4] The NIH's efforts in this area reflect a recognition that "the term 'effective dissemination' includes the

concept of diffusion of knowledge and information as well as the acceptance, inculcation, and utilization of disseminated information;" the "distribution of information alone is insufficient to ensure adoption or use."[5]

Several recent evaluations of the Program have raised questions about the NIH's success in disseminating its findings, and have suggested the need for further research in this area.[6] These reports have noted in particular that NIH has had especially limited success in reaching general and family physicians--an important target audience because they both use many of the technologies evaluated by the Program and, through the referrals they make, serve as gatekeepers who often determine the type of care their patients will receive.[7]

Medical school continuing medical education activities as a vehicle for the dissemination of CDP findings

In a 1989 study of the NIH Consensus Program, the Rand Corporation noted that continuing medical education (CME) could be a "critical dissemination vehicle" for the Program, and recommended that it "play a more prominent role in the Program's dissemination strategy."[8] Focus-group discussions with physicians recently conducted by NIH likewise found that most physicians prefer face-to-face contacts as a method of learning, and cited continuing education programs as a key source of information.[9]

Continuing medical education activities are sponsored by a wide variety of organizations, and serve as a major means for practicing doctors to keep up to date with current knowledge about medical procedures and technologies. According to the Accreditation Council for Continuing Medical Education, "medical schools, through their faculty members, provide the major resource for CME in this country."[10] (See appendix B for more information.)

Doctors in positions of leadership in medical schools and those who plan and conduct continuing education activities serve as "switching points" for new medical information and can be particularly influential in spreading CDP findings.[11] In addition to their role in setting the agenda for undergraduate, graduate, and continuing education at their own institutions, department chairs often conduct continuing education activities at their respective specialty society conferences, and are invited to speak at community hospitals.[12] As noted in the Rand report, "information may well follow a "two-step flow" from *opinion leader* to follower. . . . Major communication sources may alert specialists and academic physicians to the existence of new medical information (eg., Consensus Conference recommendations), and this information may then 'filter down' to primary care practitioners and other physicians in private practice."[13]

This report

The Rand report suggested that a survey of directors of CME regarding actual and potential uses of NIH Consensus material would be valuable.[14] This report presents an examination of the current and potential future utilization of NIH Consensus

findings by medical school continuing education programs. We provide information on NIH's efforts to reach medical school department chairs and CME directors, how these people view the Program and its products, and the extent to which the continuing education activities they sponsor serve as vehicles for the wider dissemination of NIH Consensus information. We do not attempt to assess changes in medical practice resulting from either CME activities or the Consensus Program itself.[15]

METHODOLOGY

Our primary means of data collection was a set of mail surveys of the directors of continuing education and of the chairs of the departments or divisions of family medicine, neurology, and oncology at all U.S. medical schools. We inquired about general familiarity with the Consensus Program, awareness and use of seven recent Consensus Statements, and opinions about the Program. In the findings, we focus on the responses of department chairs, who are generally key medical opinion leaders and who are more closely involved than continuing education directors in the subject matter of their departments' continuing education activities (see appendices C and D for a summary of survey responses). We supplemented this information with telephone interviews with a sample of survey respondents, discussions with NIH staff, a review of NIH dissemination materials, a review of the literature, and discussions with experts in the field. (See appendix A for detailed methodology.)

We conducted our review in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

FINDINGS

FIFTY-TWO PERCENT OF MEDICAL SCHOOL DEPARTMENT CHAIRS REPORTED HAVING SPONSORED A CONTINUING EDUCATION ACTIVITY THAT ADDRESSED THE FINDINGS OF A RECENT NIH CONSENSUS CONFERENCE.

We asked medical school department chairs if they had sponsored CME activities during the previous three years on at least one of a sample of seven topic areas, and if such activities had addressed the findings of the recent NIH Consensus Conference on each topic.[16]

Fifty-two percent had sponsored a CME activity that addressed the NIH Consensus findings on one of the sample topics. Seventeen percent had sponsored a relevant continuing education activity, but had not addressed the NIH Consensus findings on the topic.[17] Sixteen percent had not sponsored a relevant CME activity (see table 1).

Table 1: Use of CDP Findings in CME Activities: Percentage of department chairs who sponsored a recent continuing education activity on at least one of the sample topics in their field, and the percentage of these that addressed the findings of the NIH Consensus Conference on that topic

Conducted a CME activity on at least one of the sample topics in their field	Addressed the NIH Consensus Findings on that topic	Family Medicine Chairs (n=84)	Neurology Chairs (n=88)	Oncology Chairs (n=95)	Average (n=267)
Yes	Yes*	30%	47%	77%	52%
	No*	22%	20%	9%	17%
	Don't know	26%	16%	4%	15%
No		23%	17%	9%	16%
Total		100%	100%	100%	100%

Source: OIG survey of medical school department chairs, November 1992
Note: * Includes those who responded "definitely" and "probably" yes or no.
Differences are statistically significant at the .05 level.

We also inquired as to whether department chairs were aware of continuing education activities sponsored by their departments that had addressed the findings of additional Consensus Conferences, other than those in our sample. Twelve percent were aware of such additional CME activities. Of these, however, most had also addressed at least one of the Statements in the sample; only 6 (2 percent) had not also addressed at least one of the Statements in the sample.

Chairs of family medicine reported more limited use of CDP information in continuing education activities than did chairs of neurology or oncology.

We found significant variation in the reported use of Consensus information in CME activities among the three specialty groups: 30 percent of family medicine chairs, 47 percent of neurology chairs, and 77 percent of oncology chairs reported such use (see table 1).

We also found that neurology and oncology chairs were more definitive about their departments' use of CDP information in continuing education activities than were family medicine chairs: 59 percent of oncology chairs reported that they had sponsored relevant CME activities that had *definitely* addressed CDP findings; 30 percent of neurology chairs and only 12 percent of family medicine chairs reported the same. This may reflect both less intensive involvement in continuing education on the part of family medicine chairs (see appendix C, table C-17), and less use of CDP information in their continuing education activities.

We address some of the reasons for the variation in the use of Consensus information both within and among specialty groups in our second finding, beginning on page 8.

NIH Consensus findings have been addressed in a variety of medical school continuing education formats; the most common have been grand rounds.

In-house programs, such as grand rounds, and large-group activities were the most common forums for CME activities that addressed NIH Consensus findings. Oncology chairs reported significantly greater use of small-group activities, such as discussion groups, than did neurology or family medicine chairs (see appendix C, table C-10).

A number of respondents explained how they had made use of Consensus findings in their continuing education activities. One department chair reported that the CDP findings had been the central topic of a regularly scheduled department session on current topics in the field, while several noted that the findings had been addressed only peripherally, as part of larger programs. Several indicated that Consensus Statements have been useful in subspecialty conferences, departmental meetings, and formal lectures. Some respondents noted that the concise nature of the Consensus Statements makes them more appropriate for shorter, small-group discussions; they are already "distilled beyond usefulness" for longer activities. A CME director

proposed that they are "best used in small groups with an 'expert' moderator or in self-instruction format."

Medical school continuing education activities addressing NIH Consensus findings have been targeted to both in-house staff and faculty, and practicing physicians from outside the medical school setting.

Of those department chairs who reported addressing CDP information in their CME activities, 89 percent noted that these activities had been targeted to residents, 81 percent to in-house faculty, and 68 percent to in-house hospital staff.

These activities also served to reach practicing doctors beyond the medical school setting: 72 percent of department chairs reported that their activities had been targeted to local or nonlocal practicing physicians--35 percent to practicing physicians from outside the local area (see appendix C, table C-11).[18]

SEVERAL FACTORS HINDER WIDER DISSEMINATION AND ACCEPTANCE OF CDP INFORMATION AND INCORPORATION OF THAT INFORMATION INTO CONTINUING EDUCATION ACTIVITIES.

Limited familiarity with the Consensus Development Program

Sixteen percent of department chairs knew nothing about the CDP; an additional 17 percent were aware of the Program but knew little about it.[19]

Family medicine chairs reported much more limited familiarity with the Program than did oncology and neurology chairs: 27 percent of family medicine chairs, 18 percent of neurology chairs, and only 3 percent of oncology chairs reported that they had never heard of the Program. There was similar variation among the groups with regard to those who were aware of the Program but knew little about it (see table 2).

Table 2: Awareness of the CDP: Percentage of medical school CME directors and department chairs who were aware of the NIH Consensus Development Program

	CME Directors (N=79)	Department Chairs			
		Family Medicine Chairs (N=84)	Neurology Chairs (N=88)	Oncology Chairs (N=95)	Department chair average (N=267)
Very familiar	11%	14%	31%	47%	31%
Somewhat familiar, but not sure of all the details	48%	33%	34%	41%	36%
Aware, but didn't know much about it	23%	25%	17%	8%	17%
Not at all aware	18%	27%	18%	3%	16%

Source: OIG survey of medical school CME directors and department chairs, November 1992
Note: Differences among department chairs are statistically significant at the .05 level.

Awareness of specific Consensus Statements was more limited than general awareness of the CDP.[20] Again, chairs of family medicine were less likely to be aware of Consensus Statements relevant to their field than were other department chairs; for example, 89 percent of oncology chairs but only 57 percent of family medicine chairs were aware of the Statement on *Early Stage Breast Cancer*. Even many department chairs who had sponsored continuing education activities on topics that had been addressed by Consensus Conferences were not aware of the relevant Consensus

Statements on those topics. For example, only 44 percent of the chairs of family medicine who had sponsored a CME activity on gastrointestinal surgery for severe obesity were aware of the Consensus Statement on that subject (see table 3).[21]

Table 3: Awareness of Specific Consensus Statements: Percentage of all respondents, and of those who sponsored a continuing education activity that addressed each topic, who were aware of each Statement

Statement	Family Medicine Chairs		Neurology Chairs		Oncology Chairs	
	All n=61	Those who sponsored a CME activity that addressed each topic	All n=69	Those who sponsored a CME activity that addressed each topic	All n=91	Those who sponsored a CME activity that addressed each topic
Surgery for Epilepsy	-	-	85%	87% (n=54)	-	-
Clinical use of Botulinum Toxin	18%	100% (n=2)	67%	79% (n=43)	-	-
Intravenous Immunoglobulin	-	-	-	-	19%	45% (n=20)
Adjuvant Therapy for Colon and Rectum Cancer	-	-	-	-	79%	88% (n=68)
Early Stage Breast Cancer	57%	60% (n=35)	-	-	89%	92% (n=79)
Gastrointestinal Surgery for Severe Obesity	31%	44% (n=9)	-	-	-	-
Treatment of Panic Disorder	56%	55% (n=42)	-	-	-	-

Source: OIG survey of medical school department chairs; November 1992
Note: A dash (-) indicates that the group was not asked about that Statement.

In their written comments, a number of respondents demonstrated this limited familiarity with the Program. One neurology chair commented that he "was not aware of the dimension of the Program; these are worthwhile goods that are insufficiently known." A family medicine chair noted that the CDP findings "may go unnoticed at times." One CME director noted that "we have never received anything from NIH," while another suggested that "this Program is not well recognized." As one oncology

chair remarked, "I don't know all of the Consensus Conferences--how could a practicing doctor?"

Department chairs reported that their most common sources of information about the CDP during the previous three years had been direct-mail copies of Consensus Statements and journal publications.[22] Nonetheless:

- 25 percent reported that they had not received a Consensus Statement in the mail (or could not recall having received one) during the previous 3 years. This ranged from 8 percent of oncologists, to 36 percent of family physicians, to 39 percent of neurologists.[23]

- 40 percent had not read a Statement in either the *Journal of the American Medical Association* (*JAMA*) or a specialty journal in the previous 3 years. This ranged from 33 percent of family physicians, to 38 percent of neurologists, to 48 percent of oncologists.[24]

Other sources of information, including colleagues, the popular media, and continuing education activities sponsored by outside organizations, were reported by department chairs as less important ways of hearing about the Program or specific Conferences (see appendix C, table C-3).[25]

Unsuitable format of the Consensus Statements for continuing education activities

Only 33 percent of those department chairs who were familiar with the Consensus Program rated the format in which Conference findings are presented as very appropriate for CME. This figure ranged from 12 percent of family medicine chairs to 40 percent of neurology and oncology chairs. Only 18 percent of continuing education directors gave this rating.

Respondents criticized the Consensus Statements as bland, lacking in adequate background information, and lacking in sufficient data to support the findings and conclusions. One family medicine chair noted that the "format is pretty dry and the findings are not easily recalled. Might be helpful if CDP topics were contrasted with current prevailing professional practices."

Respondents also noted that it would require work on their part to translate a Consensus Statement into a format appropriate for a continuing education activity. Many suggested that they would be more likely to make use of Consensus information if they had access to materials that could readily be incorporated into their ongoing continuing education activities. Our survey respondents rated the potential usefulness of 10 types of materials for their CME activities; the materials rated most highly were CME curriculum materials for short sessions (such as grand rounds), reference

bibliographies, and conference proceedings. Video tapes of the Conferences received the lowest ratings for usefulness in continuing education.[26] (See appendix C, table C-16.)

A number of respondents offered the suggestion that slides or overheads outlining the findings and recommendations of Conferences would be very useful for CME activities, lectures, talks, and meetings. Several people with whom we spoke urged that such materials could best be used in regularly scheduled activities, such as monthly departmental update meetings or grand rounds. They suggested that NIH might make such materials available, or announce their availability, through targeted mailings to department chairs and others responsible for continuing education. The NIH could suggest in a cover letter that such people discuss Conference findings at an upcoming continuing education activity.[27]

Concerns about the Program's effectiveness and usefulness

Most medical school department chairs voiced general respect for the Consensus Program.[28] Nevertheless, a number of specific concerns were voiced by respondents familiar with the Program about limitations to its effectiveness and usefulness. The most prominent of these concerns were related to the appropriateness of Consensus panelists and speakers, the practicality and directiveness of Consensus Statements, and the adequacy of CDP procedures. A few respondents expressed fundamental objections to the use of consensus methods to address controversies in medicine. Many of these comments parallel criticisms raised in previous evaluations of the NIH Consensus Program, including NIH-commissioned studies by Rand, the University of Michigan, and the Institute of Medicine.

The groups we surveyed represent some of the best informed and most up-to-date members of the medical community. Their concerns, whether reflective of actual or perceived weaknesses in the CDP, represent a serious barrier to wider dissemination and acceptance of NIH Consensus findings.

Choice of panelists and speakers: In unprompted written comments, 10 percent of those department chairs who were familiar with the Consensus Program voiced concerns about the credentials and intellectual independence of Conference panelists and speakers.[29] As one summed up these concerns, "the CDP is highly dependent on the panel selected to make the assessment. The stature, knowledge, and respect of a single individual can alter the conclusions in an inappropriate manner." The predominant criticism among these respondents was that the process is biased by the selection of NIH "insiders," both to present evidence and to sit on the panels. As one neurologist put it, "attendees appear limited and the panel of 'experts' seems hand-picked; it doesn't represent a true broad sampling of opinion to develop 'consensus,' but just reflects a preconceived opinion of NIH or a small panel." A CME director, himself a physician, described participants as the "same insider crowd--'experts' who often have their own conflicts of interest."

Family physicians were particularly critical of what they regarded as the subspecialty focus and research-orientation of the panelists and speakers.[30] In a typical criticism, one strongly urged that NIH "balance the committees towards practical users of the information away from so-called experts." Another voiced the widely noted comment that "the panels should include family physicians since we are likely to be the 'consumers' of much of the Consensus findings."

Practicality and directiveness of Statements: Only 40 percent of those department chairs who were familiar with the Program strongly agreed that Consensus recommendations are practical--ranging from 26 percent of family physicians to 52 percent of neurologists. Likewise, only 38 percent of department chairs strongly agreed that Consensus recommendations are sufficiently directive--ranging from 26 percent of family physicians to 46 percent of neurologists (see appendix C, table C-14).

While there were few strongly negative ratings with regard to these characteristics of Consensus Statements, we believe that the fact that 60 percent of department chairs do not strongly regard the Statements as sufficiently practical or directive may well serve as a barrier to greater use of NIH Consensus findings in their CME activities.

Family physicians were particularly critical of the usefulness of Consensus Statements for their practices. In a typical, unprompted comment, one argued that Consensus Conferences "are biased by a subspecialty focus. The underlying assumption that the Conference results are relevant for application in general medical practice is, at best, partially correct. The Program would benefit from a vast increase in practice-based research." Another similarly noted that "the requisite knowledge for frontline practice has not and will not come from subspecialty, highly selected patients. Thus Consensus guidelines are often unuseful and sometimes irrelevant to generalists." Another argued that the panels should "make the recommendations far more practical and applicable. Consensus Statements are written by research experts not knowledgeable about the patients and settings for which they are intended."[31]

Adequacy of CDP procedures: Respondents identified two areas of concern regarding the mechanics of the Consensus process: Conference planning and length.

In unprompted comments, 14 percent of those department chairs who were familiar with the Program criticized the process used for planning Consensus Conferences. They urged that there be broader participation in the planning stages of Conferences, including topic-, panelist-, and speaker selection. Several noted, in particular, that there should be greater medical school involvement in the planning process, and urged that all medical school department chairs in a relevant specialty should be invited to attend the actual Conferences. Also in unsolicited comments, 18 percent of those family medicine chairs who were familiar with the Program urged greater involvement of primary care specialists in the planning of Conferences.

Only 31 percent of respondents strongly agreed that the 2-1/2 day length of the Conferences was sufficient to adequately consider the issues.[32] Their concerns were

illustrated by 2 respondents who had particular familiarity with the Program: One department chair, who had chaired an NIH Consensus Conference, noted that "minority opinions get lost in the rush--sometime after midnight--to complete the report and achieve consensus. I find the format a bit too rushed--even a few extra hours would help." A second respondent, who had participated on two Consensus panels, likewise rated the length of the Conferences has highly inadequate.

Objections to consensus methods: In unprompted comments, 6 percent of those respondents who were familiar with the CDP expressed a 'philosophical problem' with the concept of consensus development as a means of resolving controversies in medicine.[33] Some of these respondents objected to what they regarded as a 'cookbook approach' to medicine, arguing that this type of activity could be harmful to the independent judgment of practicing doctors. Many of these respondents asserted that Consensus recommendations are the 'result of compromise,' and argued for a more rigorous method of technology assessment. One urged that NIH use an "explicit, evidence-based, patient preference-focussed approach."

One neurology chair summed up what several believed is the fundamental paradox of the consensus process: "The extent of information and studies that need to be reviewed for the consensus cannot be mastered unless the panelists are already expert. Yet if they are, they will bring their own biases to the panel."[34]

RECOMMENDATIONS

Our findings indicate that medical school continuing education activities can play an important part in the dissemination of NIH Consensus findings. Indeed, medical school department chairs and others responsible for planning and conducting continuing education activities are key opinion leaders in their fields and can serve as major conduits for transmitting such information more broadly.

These findings also suggest, however, that this dissemination channel is not being fully utilized, in part because (1) a significant minority of those people who play a role in medical school continuing education know little or nothing about the Program; (2) many of those who are aware of the CDP feel that its products cannot be readily incorporated into their activities; and (3) some voice basic concerns about the current effectiveness and usefulness of the Program.

To maximize the potential for medical school continuing education as a vehicle for disseminating Consensus findings, we offer the following recommendations:

The NIH should take steps to increase awareness of the CDP among those responsible for continuing medical education. The NIH should make special efforts to reach those who sponsor continuing education for general and family physicians.

Considering the important role of department chairs and CME directors in planning and conducting medical school continuing education activities, it is important that NIH reach them and ensure that they are familiar with the CDP and its products. To do so, NIH should:

- Maximize the effectiveness of direct-mailing efforts by tailoring such mailings to department chairs and CME directors *as educators*. While some currently receive direct-mailings in their capacity as members of specialty societies, we believe that specialized mailings would be more effective. The NIH could use such mailings as an opportunity to encourage recipients to cover Consensus findings in their continuing education activities.

- Work with individual department chairs, members of CME advisory committees, deans, and continuing education directors at key institutions--or groups of such individuals--to plan appropriate dissemination strategies.

In addition, NIH could:

- Work with organizations other than medical schools--including relevant specialty societies, associations of medical school professors in particular specialty areas (such as the Society of University Professors of Neurology and the Society of Teachers of Family Medicine), the Society of Medical College Directors of CME, the Association of American Medical Colleges, and the Accreditation

Council for Graduate Medical Education--to plan appropriate dissemination strategies.

- Explore ways of identifying those people in individual departments who are most closely involved in the planning and conduct of continuing education activities in particular subject areas.

In each of these areas, NIH should make special efforts to reach general and family physicians. They are an important target audience for the CDP because they both use the technologies addressed in Consensus Conferences, and serve as gatekeepers who determine the type of specialty care their patients receive. Their role is likely to grow in importance as a result of expected reforms in the health care system and an increasing emphasis on managed care systems.

The NIH should identify more effective ways of encouraging the incorporation of Consensus findings into continuing education activities.

The NIH should explore ways of packaging and disseminating Consensus findings that would facilitate their use in CME activities. In this effort, NIH should:

- Produce--or work with other organizations to produce--slides, overheads, or other curriculum materials. The NIH should build upon its experience with prior efforts in this area.

- Conduct focus-group discussions with key audiences of Consensus findings, including medical school department chairs and CME directors, to learn further ideas on format issues.

The NIH could also examine the attitudes and practices of other types of continuing education sponsors. In its future research, NIH could consider the following ideas:

- Survey CME directors at community hospitals, State medical societies, State and local medical and specialty societies, and local chapters of national societies regarding their current and potential uses of Consensus information.

- Conduct focus group discussions with representatives of national specialty societies, including the American Academy of Family Practice and other primary-care groups, regarding their current and potential uses of Consensus information.

The NIH should strengthen its efforts to understand and address basic concerns about the Consensus Development Program.

The NIH has demonstrated a firm commitment to ongoing evaluation and improvement of the Consensus Development Program, including Conference planning, conduct, and information dissemination. Because no dissemination efforts will be

successful in reaching and influencing people who have basic concerns about the effectiveness and usefulness of the Program's methods, NIH should intensify its efforts to understand and address such concerns. Some of these concerns may be based on limited familiarity with or understanding of the CDP. This possibility suggests the need for intensified efforts to clarify the Program's procedures, targeting in particular key groups of opinion leaders, such as those we surveyed. At the same time, as noted in the report, the fact that some of these concerns have been raised repeatedly in evaluations of the CDP may suggest a genuine need to reexamine some of the Program's methods.

The NIH could use focus groups or informal working groups of department chairs and CME directors, and other key audiences, to learn about and address these concerns.

As initial steps, NIH should:

- Identify and test better ways of involving a wider range of people in the planning stage of upcoming Consensus Conferences to maximize acceptance of the outcomes.

- Address concerns about panel and speaker selection by (1) strengthening its efforts to increase primary-care representation, and (2) clearly stating in each Consensus Statement how panelists and speakers were selected and reporting their credentials.

AGENCY COMMENTS

We solicited and received comments on a draft of this report from the Public Health Service (PHS). The PHS concurred with our recommendations and identified several activities that NIH currently has underway or has planned that address these issues.

In particular, PHS noted that the NIH Office of Medical Applications of Research is in the process of publishing a revised statement of operating guidelines and procedures for the CDP. In addition, NIH will explore new ways of exploiting CME as an avenue for dissemination of Consensus findings. The NIH will also continue its ongoing efforts to evaluate the procedures and impact of the CDP.

The PHS also suggested that the report be revised to make clear that respondents' criticisms of the Consensus Program may be based on limited familiarity with the Program or out-of-date information; PHS suggested that these opinions may reflect perceptions of problems, rather than actual problems. We continue to believe that the concerns reported to us by survey respondents merit serious attention by NIH. First, our respondents represent some of the best informed and most up-to-date members of the medical community, and are in key positions to serve as conduits for the dissemination of Consensus findings; their opinions are important. Second, the criticisms raised by this critical minority of respondents have been identified in prior studies, some of which were commissioned by NIH itself; this suggests either continuing problems or a need for better communication. We have modified the text to put these issues into clearer perspective.

The complete text of the PHS comments appears in appendix E.

APPENDIX A

METHODOLOGY

Our findings and recommendations are based upon five main sources of information:

1. **Mail surveys:** We conducted two sets of mail surveys in November 1992. First, we selected three specialty areas in which recent Consensus Conferences had been held --family medicine, neurology, and oncology--and surveyed the chairs of those departments or divisions at all U.S. medical schools, as listed in the Association of American Medical Colleges' Directory of American Medical Education (see appendix C for a summary of responses). Second, we surveyed the directors of CME at all U.S. medical schools; the Accreditation Council for Continuing Medical Education provided us with its mailing list (see appendix D for a summary of responses).

In our surveys, we inquired about overall familiarity with the Consensus Development Program, awareness of a sample of specific Consensus Statements, use of Consensus findings in continuing education activities, and opinions about the Program and its products. We asked department chairs to consult appropriate colleagues regarding specific subject areas, as necessary.

Of the 12 Consensus Conferences held in 1990 and 1991, we selected 7 for our sample, targeted to a variety of audiences (see table A-1).

Table A-1: Target audiences for the 7 sample Consensus Statements

	Target audiences included:		
Consensus Statement	**Family Medicine Chairs**	**Neurology Chairs**	**Oncology Chairs**
Surgery for Epilepsy (March 1990)		X	
Clinical use of Botulinum Toxin (November 1990)	X	X	
Intravenous Immunoglobulin (May 1990)			X
Adjuvant Therapy for Colon and Rectum Cancer (April 1990)			X
Early Stage Breast Cancer (June 1990)	X		X
Gastrointestinal Surgery for Severe Obesity (March 1991)	X		
Treatment of Panic Disorder (September 1991)	X		

Our sample selection was based on discussions with NIH staff and respondents to our survey pretest, and was designed to produce a sample that included more than one

Statement addressed to each of the three specialty groups. Two of the Statements were addressed to more than one of the groups; the other five were addressed to only one of the groups each. We asked family medicine chairs about 4 of the 7, neurology chairs about 2 of the 7, and oncology chairs about 3 of the 7.

We received a response rate of 77 percent among department chairs and 66 percent among CME directors. Our respondents represented medical schools of all sizes, types of sponsorship, and geographic location. We do not believe that nonrespondents differed in any significant way from respondents (see appendices C and D for breakdowns of our response rates).

In the findings, we have focussed on the responses of department chairs, who are generally key medical opinion leaders and who are more closely involved than CME directors in the subject matter of their departments' continuing education activities.

2. **In-person and telephone discussions with medical school department chairs and continuing education directors:** We spoke with a large number of CME directors and department chairs both before and after the mail survey. In particular, we telephoned all those department chairs who reported in their surveys that their departments' relevant continuing education activities had *definitely not* addressed Consensus findings, in order to learn better why not. We also followed up with a sample of those who responded that their departments' CME activities *definitely had* addressed CDP findings, in order to learn more of their thoughts about the Program and its dissemination activities.

3. **Contacts with NIH:** We conducted numerous formal and informal discussions with the staff of NIH's Office of Medical Applications of Research and a review of NIH's dissemination materials. We also attended a July 1992 meeting of the NIH Coordination Committee on the Assessment and Transfer of Technology, and both the public and executive sessions of the September 1992 NIH Consensus Conference on Gallstones and Laparoscopic Cholecystectomy.

4. **Other discussions:** We spoke with directors of CME at several medical specialty societies, including the American Academy of Neurology, the American Society of Clinical Oncology, the American College of Cardiology, and the American Psychiatric Association; and representatives of the Alliance for Continuing Medical Education, the Accreditation Council for Continuing Medical Education, the Society of Medical College Directors of Continuing Medical Education, the Association of American Medical Colleges, the American Medical Association, the Rand Corporation, the Institute of Medicine, the Public Health Service's Agency for Health Care Policy and Research, and the Office of the Assistant Secretary for Planning and Evaluation.

5. **Review of the literature:** We examined the literature on medical technology assessment, the diffusion of medical innovations, the theory and practice of medical education, and physician information habits.

APPENDIX B

CONTINUING MEDICAL EDUCATION: BACKGROUND

The American Medical Association and the Accreditation Council for Continuing Medical Education (ACCME) define continuing education as consisting of "educational activities which serve to maintain, develop, or increase the knowledge, skills, and professional performance and relationships that a physician uses to provide services for patients, the public, or the profession," and its content as "that body of knowledge and skills generally recognized by the profession as within the basic medical sciences, the discipline of clinical medicine, and the provision of health care to the public."[35] Such information can be conveyed in a variety of settings and formats, including periodic conferences and formal lectures; ongoing hospital grand rounds, seminars, and discussion groups; and self-instructional materials.

To ensure some degree of consistency, the ACCME accredits most sponsors of continuing education for physicians, including most medical schools, national medical specialty societies, teaching and community hospitals, State and local specialty societies, voluntary health organizations, pharmaceutical and device firms, and for-profit educational companies. State medical societies can be accredited both to grant credit for their own programs, and to accredit community hospitals as sponsors of in-house and locally marketed activities. The ACCME also accredits the NIH Office of Education, which grants credit to physicians who attend the public sessions of NIH Consensus Conferences. In addition, NIH has begun to explore the possibility of granting credit for self-study of printed Consensus Statements.

Physicians may be required or encouraged to complete a certain number of hours of CME by their respective State medical societies; national, State, or local professional organizations; State licensing boards; malpractice insurers; and hospitals. To further encourage participation in continuing education, the AMA grants the Physician's Recognition Award to doctors upon completion of certain requirements.

The primary continuing education activities of national specialty societies are large annual meetings that often draw more than 10,000 attendees and involve hundreds of different educational offerings. A society's planning committee or education office usually selects such offerings from among proposals submitted by members. Some societies also conduct smaller educational offerings throughout the year, either at their headquarters or regionally.

Medical schools and teaching hospitals offer a wide range of continuing education programs. Some of these are conducted in-house at the school or hospital, and are intended for in-house faculty and staff. Others are marketed to a broader audience, require a fee, and are held at hotels, conference facilities, or other hospitals.

At many institutions, including most medical schools and hospitals, continuing education activities are coordinated by an office of continuing education, which provides educational and administrative support. The structure of these offices varies greatly from one institution to another: Some CME offices are headed by physicians, but many are headed by either educational professionals or administrators.

The CME directors' expertise in curriculum development, familiarity with physicians' educational activities, and position in the medical school all suggest that they could play a useful role in the dissemination of Consensus findings. Many of those who responded to our survey urged that they receive Consensus information directly. One assistant dean for medical education noted that "the formal CME activities of medical schools comprise a major system for disseminating Consensus Statements."

At the same time, these CME directors generally have a limited role in deciding what information is presented in the activities for which they grant credit. They generally rely on standing or ad-hoc committees of medical faculty or staff for topic selection and program development. The chairs of individual medical school departments are key players in setting the agenda for continuing education at their institutions.[36] The specific content of most courses is determined by the individual faculty or staff; as one director noted, "the vast majority of our programs are initiated, planned, and executed by individual departments."[37]

APPENDIX C

SUMMARY OF DEPARTMENT CHAIR SURVEY RESPONSES

Tables: Page C-2

Table C-1: OIG survey sample sizes and response rates				
	Family Medicine Chairs	Neurology Chairs	Oncology Chairs	Total
Sample Size	110	118	119	347
Number of Respondents	84	88	95	267
Response Rate	76%	75%	80%	77%

Table C-2: Familiarity with the CDP				
	Family Medicine Chairs (n=84)	Neurology Chairs (n=88)	Oncology Chairs (n=95)	Average (n=267)
Very familiar	14%	31%	47%	31%
Somewhat familiar, but not sure of all the details	33%	34%	41%	36%
Aware, but didn't know much about it	25%	17%	8%	17%
Not at all aware	27%	18%	3%	16%

Source: OIG survey of medical school department chairs, November 1992
Note: Differences are statistically significant at the .05 level.

Table C-3: Sources of information about the CDP				
	Family Medicine Chairs (n=61)	Neurology Chairs (n=72)	Oncology Chairs (n=92)	Average (n=225)
Received a CDP Statement by mail	64%	61%	92%	* 75%
Received advanced notice of a conference by mail	39%	67%	67%	* 60%
Read a CDP Statement in JAMA	62%	31%	32%	* 40%
Read about the CDP in JAMA	61%	22%	22%	* 32%
Read a CDP Statement in a specialty journal	13%	47%	29%	* 31%
Read about the CDP in a specialty journal	18%	35%	30%	28%
Received a CDP Statement at a CME activity, professional society meeting, or conference	26%	22%	33%	28%
Heard about the CDP from colleagues within own institution	15%	25%	35%	* 26%
Heard about the CDP from colleagues at outside institutions	15%	21%	33%	* 24%
Read or saw something about the CDP in the popular media	18%	4%	23%	* 16%

Source: OIG survey of medical school department chairs, November 1992
Note: Excludes those 42 department chairs (16%) who described themselves as "Not at all aware" of the CDP; an asterisk (*) indicates that differences among department chairs are statistically significant at the .05 level.

Table C-4: Awareness of each of 7 sample Consensus Statements			
Statement	**Family Medicine Chairs**	**Neurology Chairs**	**Oncology Chairs**
Surgery for Epilepsy	-	85% (n=68)	-
Clinical Use of Botulinum Toxin	18% (n=61)	67% (n=69)	-
Intravenous Immunoglobulin	-	-	19% (n=91)
Adjuvant Therapy for Colon and Rectum Cancer	-	-	79% (n=92)
Early Stage Breast Cancer	57% (n=61)	-	89% (n=91)
Gastrointestinal Surgery for Severe Obesity	31% (n=61)	-	-
Treatment of Panic Disorder	56% (n=61)	-	-

Source: OIG survey of medical school department chairs, November 1992
Note: Excludes those 42 department chairs (16%) who described themselves as "Not at all aware" of the CDP; a dash (-) indicates that the group was not asked about a given statement.

Table C-5: Awareness of additional Consensus Statements, not included in our sample

Number of Statements	Percentage of respondents (n=225)
None	72%
1	19%
2	7%
3	2%
4	1%

Source: OIG survey of medical school department chairs, November 1992

Table C-6: Percentage reporting that their departments address each type of topic in their CME activities

	Family Medicine Chairs	Neurology Chairs	Oncology Chairs	Average
a. The results of medical technology assessments	57% (n=83)	64% (n=88)	67% (n=93)	63% (n=264)
b. Clinical applications of research	83% (n=83)	91% (n=88)	88% (n=94)	88% (n=265)
c. Specialty society practice guidelines/ practice parameters	77% (n=82)	55% (n=87)	71% (n=94)	* 68% (n=263)

Source: OIG survey of medical school department chairs, November 1992
Note: An asterisk (*) indicates that the differences among department chairs are statistically significant at the .05 level.

Table C-7: Percentage of department chairs who sponsored CME activities on each of 7 sample topic areas			
Topic	**Family Medicine Chairs** (n=84)	**Neurology Chairs** (n=88)	**Oncology Chairs**
Surgery for Epilepsy	-	78%	-
Clinical use of Botulinum Toxin	2.4%	57%	-
Intravenous Immunoglobulin	-	-	23% (n=94)
Adjuvant Therapy for Colon and Rectum Cancer	-	-	75% (n=94)
Early Stage Breast Cancer	56%	-	[illegible] (n=95)
Gastrointestinal Surgery for Severe Obesity	12%	-	-
Treatment of Panic Disorder	69%	-	-

Source: OIG survey of medical school department chairs, November 1992
Note: A dash (-) indicates that the group was not asked about a given topic.

Table C-8: Percentage of those department chairs who sponsored CME activities on each of 7 sample topic areas who were aware of a relevant Consensus Statement

Topic	Family Medicine Chairs	Neurology Chairs	Oncology Chairs
Surgery for Epilepsy	-	87% (n=54)	-
Clinical use of Botulinum Toxin	100% (n=2)	79% (n=43)	-
Intravenous Immunoglobulin	-	-	45% (n=20)
Adjuvant Therapy for Colon and Rectum Cancer	-	-	88%
Early Stage Breast Cancer	60% (n=35)	-	92% (n=79)
Gastrointestinal Surgery for Severe Obesity	44% (n=9)	-	-
Treatment of Panic Disorder	55% (n=42)	-	-

Source: OIG survey of medical school department chairs, November 1992
Note: Excludes those who were not at all aware of the program; a dash (-) indicates that the group was not asked about a given topic.

Table C-9: Percentage of department chairs reporting that a relevant CME activity had addressed the findings of at least one of seven recent Consensus Conferences during the previous 3 years

	Family Medicine Chairs (n=65)	Neurology Chairs (n=73)	Oncology Chairs (n=85)	Average (n=223)
Definitely yes	15%	36%	65%	41%
Probably yes	23%	21%	20%	21%
Definitely not	12%	14%	3%	9%
Probably not	15%	11%	7%	11%
Don't know	34%	19%	5%	18%

Source: OIG survey of medical school department chairs, November 1992
Note: Includes only those 223 who did address at least one of the 7 sample topics in a CME activity; differences are statistically significant at the .05 level.

Table C-10: Formats of CME activities that addressed CDP information

	Family Medicine Chairs (n=25)	Neurology Chairs (n=41)	Oncology Chairs (n=73)	Average (n=139)
Large group activity	60%	56%	44%	50%
Small group activity (eg. discussion group/workshop)	24%	34%	53%	* 42%
In-house activity (eg. grand rounds)	60%	73%	71%	70%
Activity open to outside audiences	40%	44%	34%	38%
Self-directed study	4%	5%	5%	5%

Source: OIG survey of medical school department chairs, November 1992
Note: Includes only those 139 (62 percent) who reported that their CME activities on the relevant topics had definitely or probably addressed CDP findings; asterisk (*) indicates that the differences noted are statistically significant at the .05 level.

Table C-11: Target audiences for medical school CME activities that addressed CDP information

	Family Medicine Chairs (n=25)	Neurology Chairs (n=41)	Oncology Chairs (n=73)	Average (n=139)
In-house hospital staff	44%	76%	71%	* 68%
In-house medical school faculty	48%	98%	84%	* 81%
Residents	80%	95%	89%	89%
Researchers from other institutions	0%	5%	16%	10%
Practicing physicians: local or nonlocal	68%	76%	71%	72%
From the local area	68%	66%	70%	68%
From outside the local area	40%	41%	30%	35%

Source: OIG survey of medical school department chairs, November 1992
Note: Includes only those 139 (62 percent) who reported that their CME activities on the relevant topics had definitely or probably addressed CDP findings; an asterisk (*) indicates that the differences noted are statistically significant at the .05 level.

Table C-12: Additional use of CDP information in CME				
	Family Medicine Chairs	Neurology Chairs	Oncology Chairs	Average n=264
Percentage aware of CME activities that have been conducted at their institution that addressed information from a Consensus Conference other than those in our sample	7% (n=83)	9% (n=87)	18% (n=94)	* 12% (n=264)
Percentage that have attended a CME activity sponsored by an organization other than their own that addressed information from a Consensus Conference	14% (n=83)	22% (n=87)	44% (n=95)	* 28% (n=263)

Source: OIG survey of medical school department chairs, November 1992
Note: An asterisk (*) indicates that the differences noted are statistically significant at the .05 level.

Table C-13: Of those 73 (28 percent) that attended a CME activity sponsored by another organization, the percentage reporting that this activity had been sponsored by each type of organization				
	Family Medicine Chairs (n=12)	Neurology Chairs (n=19)	Oncology Chairs (n=42)	Average (n=73)
a. Another medical school/teaching hospital	33%	32%	29%	30%
b. A national specialty society	58%	79%	95%	85%
c. A state or local specialty society	17%	5%	12%	11%
d. A for-profit firm (eg., a pharmaceutical company, etc.)	25%	11%	7%	11%

Source: OIG survey of medical school department chairs, November 1992

Table C-14: Comments on the CDP						
		Very much	Some what	A little	Not at all	N/A
a. the topics addressed in NIH Consensus Conferences are timely	**Average**	62	32	4	0	2
	Family Medicine	36	51	11	0	2
	Neurology	77	17	1	0	4
	Oncology	68	30	1	0	0
b. the issues addressed by the CDP are appropriate for resolution through the group judgment method of consensus development	**Average**	38	47	12	1	3
	Family Medicine	39	41	15	0	5
	Neurology	46	45	6	0	3
	Oncology	30	52	14	2	1
c. the Consensus Statements usefully distill large bodies of information	**Average** *	48	41	9	1	2
	Family Medicine	49	31	16	0	3
	Neurology	52	38	4	1	4
	Oncology	45	49	7	0	0
d. the 2-1/2 day format of the NIH Consensus Conferences allows sufficient time to examine and consider the issues in question	**Average**	31	39	9	4	18
	Family Medicine	24	32	14	7	24
	Neurology	35	42	7	0	16
	Oncology	33	40	7	4	16
e. the recommendations of the consensus panels are practical	**Average** *	40	50	7	1	3
	Family Medicine	26	54	13	3	3
	Neurology	52	42	3	0	3
	Oncology	39	52	7	0	2
f. the Consensus Statements are sufficiently directive	**Average** *	38	47	10	1	4
	Family Medicine	26	51	15	3	5
	Neurology	46	46	4	0	4
	Oncology	41	46	10	1	2
g. the recommendations are directed towards clinical, not just research audiences	**Average**	55	40	3	0	2
	Family Medicine	40	45	12	0	3
	Neurology	58	39	0	0	3
	Oncology	62	37	0	0	1
h. NIH sponsorship of the CDP enhances the credibility of the Program's findings	**Average**	63	24	9	2	3
	Family Medicine	56	23	11	2	8
	Neurology	71	22	3	3	1
	Oncology	61	26	11	1	1

Table C-14: Comments on the CDP						
		Very much	Some what	A little	Not at all	N/A
i. the topics addressed by the CDP are appropriate for incorporation into CME activities	**Average**	52	38	9	1	1
	Family Medicine	38	48	13	0	2
	Neurology	58	35	4	1	1
	Oncology	57	34	9	1	0
j. the format in which the findings of Consensus panels are presented are useful for CME activities	**Average**	33	45	16	2	4
	Family Medicine	12	60	24	2	3
	Neurology	42	39	12	3	4
	Oncology	40	40	14	2	3

Source: OIG survey of medical school department chairs, November 1992
Note: Excluding those who were not at all aware of the CDP; n=222 (Family Medicine n=61; Neurology n=69; Oncology n=92); an asterisk (*) indicates that the differences are statistically significant at the .05 level; numbers are in percent.

Table C-15: Degree of respect for the findings of the CDP				
	Great Respect	Some respect	A little respect	No respect
Average	**49**	**44**	**8**	**0**
Family Medicine	38	52	10	0
Neurology	64	32	3	0
Oncology	44	46	10	0

Source: OIG survey of medical school department chairs, November 1992
Note: Excluding those who were not at all aware of the CDP; n=220 (Family Medicine n=61; Neurology n=68; Oncology n=91); the differences among department chairs are statistically significant at the .05 level.

Table C-16: Percentage of department chairs describing each type of material as potentially useful for their CME activities

	Family Medicine Chairs	Neurology Chairs	Oncology Chairs	Average
CME curriculum materials for small-group settings	89%	76%	80%	81%
CME curriculum materials for large-group settings	78%	69%	62%	70%
CME curriculum materials for self-directed study	80%	64%	61%	* 68%
CME curriculum materials for short sessions (eg., 1 hour grand rounds)	90%	90%	83%	88%
CME curriculum materials for longer CME activities (1 day conferences/ courses)	45%	45%	39%	43%
Videotapes of Conference highlights	42%	49%	35%	42%
Videotapes of Conference press conferences	9%	11%	6%	9%
Conference proceedings in booklet form	62%	82%	81%	* 75%
Reference bibliographies	71%	86%	85%	* 81%
Complete listing of past CDP topics	83%	83%	74%	80%

Source: OIG survey of medical school department chairs, November 1992
Note: N is based on all 267 department chair respondents, regardless of their level of awareness of the CDP; the response rate for individual questions ranged from 235 to 250; an asterisk (*) indicates that the differences among department chairs are statistically significant at the .05 level.

Table C-17: Reported degree of department-chair involvement in the selection of topics for CME activities in their department				
	Family Medicine Chairs (n=68)	Neurology Chairs (n=67)	Oncology Chairs (n=66)	Average (n=201)
Very involved	44%	78%	65%	62%
Somewhat involved	47%	16%	33%	32%
Not at all involved	9%	6%	2%	6%
Source: OIG survey of medical school department chairs, November 1992				

SURVEY INSTRUMENT: MEDICAL SCHOOL DEPARTMENT CHAIRS

The following survey was sent to chairs of family medicine. Similar surveys were sent to chairs of neurology and oncology; in those surveys, questions A-3 and B-2 addressed Consensus topics relevant to those fields.

SECTION A: AWARENESS OF THE NIH CONSENSUS DEVELOPMENT PROGRAM

1. Prior to receiving this survey, how familiar were you with the National Institutes of Health Consensus Development Program? Please check one:

	✓
Very familiar	
Somewhat familiar, but not sure of all the details	
Aware, but didn't know much about it	
Not at all aware	

If Not at all aware, then please go to Section B on Page 2. Otherwise, please continue.

2. From what sources have you heard about the CDP during the past three years? Please check all that apply:

SOURCE	✓
a. Received advance notice of at least one upcoming NIH Consensus Conference in the mail	
b. Received at least one NIH Consensus Statement in the mail	
c. Received at least one NIH Consensus Statement at a CME activity, professional society meeting, or conference	
d. Heard about the CDP from colleagues within my institution	
e. Heard about the CDP from colleagues at other institutions	
f. Read about the CDP in *JAMA*	
g. Read about the CDP in a specialty journal. Please specify:	
h. Read or saw something about the CDP in the popular media	
i. Read at least one NIH Consensus Statement in *JAMA*	
j. Read at least one NIH Consensus Statement in a specialty journal. Please specify:	
k. Other. Please specify:	

3. Prior to receiving this survey, were you aware of the following specific Consensus Statements?

TOPIC	Yes	No
a. *Clinical Use of Botulinum Toxin* (November 1990)		
b. *Early Stage Breast Cancer* (June 1990)		
c. *Gastrointestinal Surgery for Severe Obesity* (March 1991)		
d. *Treatment of Panic Disorder* (September 1991)		

4. Please list any other specific Consensus Statements of which you are aware:

SECTION B: USE OF NIH CONSENSUS CONFERENCE INFORMATION

1. Does your department address the following types of topics in CME activities?

	Yes	No
a. The results of medical technology assessments		
b. Clinical applications of research		
c. Specialty society practice guidelines/ practice parameters		

2. Has your department conducted a CME activity in the past three years (either in-house or for outside audiences) that addressed, at least in part, any of the following topics:

TOPIC	Yes	No	Don't Know
a. Clinical Use of Botulinum Toxin			
b. Early Stage Breast Cancer			
c. Gastrointestinal Surgery for Severe Obesity			
d. Treatment of Panic Disorder			

3. If YES for at least one of these topics, were the findings of the NIH Consensus Conference on that topic addressed in the CME activity(ies)? Please check one:

	✓
Definitely yes	
Probably, but not sure	
Don't know	
Probably not, but not sure	
Definitely not	

3b. If YES, what was the format(s) of the activity(ies)? Please check all that apply:

	✓
a. Large group activity	
b. Small group activity (eg. discussion group/ workshop)	
c. In-house activity (eg. grand rounds)	
d. Activity open to outside audiences	
e. Self-directed study	
f. Other: Please describe:	

3c. To whom was the activity(ies) targeted? Please check all that apply:

	✓
a. In-house hospital staff	
b. In-house medical school faculty	
c. Residents	
d. Researchers from outside your institution	
e. Practicing physicians from the local area	
f. Practicing physicians from outside the local area	
g. Other: Please describe:	

4. Are you aware of any CME activities sponsored by your institution that have addressed information from other NIH Consensus Conferences?

Yes _____ No _____

4b. If YES, please list which Consensus Conference(s):

5. Have you ATTENDED any CME activity sponsored by an organization other than your own that addressed the findings of one of the NIH Consensus Conferences noted above?

Yes _____ No _____

5b. If **YES**, what sort of organization sponsored this activity(ies)? Please check all that apply:

	✓
a. Another medical school/teaching hospital	
b. A national specialty society	
c. A state or local specialty society	
d. A for-profit firm (eg., a pharmaceutical company, etc.)	
e. Other (please specify):	

SECTION C: COMMENTS ON THE CDP

1. **The opinions of CME and clinical professionals towards the CDP and towards group judgment efforts in general may affect the way in which specific recommendations from the Program are received. In the following table, we ask you to answer several questions by circling a choice on a four-point scale, where 1 = Very Much, 2 = Somewhat, 3 = A Little, and 4 = Not at All. If you are unable to answer a question, please circle Not Applicable, NA.**

Please rate the degree to which:	Very Much	Some-what	A Little	Not at All	NA
a. the topics addressed in NIH Consensus Conferences are timely	1	2	3	4	NA
b. the issues addressed by the CDP are appropriate for resolution through the group judgment method of consensus development	1	2	3	4	NA
c. the Consensus Statements usefully distill large bodies of information	1	2	3	4	NA
d. the 2 1/2 day format of the NIH Consensus Conferences allows sufficient time to examine and consider the issues in question	1	2	3	4	NA
e. the recommendations of the consensus panels are practical	1	2	3	4	NA
f. the Consensus Statements are sufficiently directive	1	2	3	4	NA
g. the recommendations are directed towards clinical, not just research audiences	1	2	3	4	NA
h. NIH sponsorship of the CDP enhances the credibility of the Program's findings	1	2	3	4	NA
i. the topics addressed by the CDP are appropriate for incorporation into CME activities	1	2	3	4	NA
j. the format in which the findings of Consensus panels are presented are useful for CME activities	1	2	3	4	NA

2. Please rate your overall degree of respect for the findings of NIH Consensus Development Conferences (circle one):

Great Respect	Some Respect	A little Respect	No Respect
1	2	3	4

SECTION D: CME ACTIVITIES

In this section, we ask how NIH might make information from the NIH Consensus Development Program more useful for CME activities.

1. Would it be useful if NIH made the following materials related to Consensus Development Program topics available for your use in CME activities? Please check Yes or No:

MATERIALS	Yes	No
a. CME curriculum materials for small group settings		
b. CME curriculum materials for large group settings		
c. CME curriculum materials for self-directed study		
d. CME curriculum materials for short sessions (eg. 1 hour grand rounds)		
e. CME curriculum materials for longer CME activities (eg. 1 day conferences/courses)		
f. Videotapes of conference highlights		
g. Videotapes of conference press conferences		
h. Conference proceedings in booklet form		
i. Reference bibliographies		
j. Complete listing of past CDP topics		
k. Other: Please specify:		

2. How else might NIH work with medical school faculty to facilitate the use of Consensus Development information in CME activities?

3. Please add any additional comments:

SECTION E: RESPONDENT INFORMATION

In order to better understand the responses to our survey questions, we ask a few questions about your professional background. This information will be used solely in aggregate, and will be kept confidential.

Your name: _____

Your title: _____

1. Please note your area of specialty: _____

2. How long have you been head of your department or section? _____

3. Please rate the degree to which you are involved in the selection of topics for CME activities in your department (circle one):

Very Involved	Somewhat Involved	Not at all Involved

Thank you for taking time to complete this survey; we appreciate your assistance. Please return the survey in the enclosed postage-paid envelope to

HHS/OIG/OEI

Tel:
FAX:

APPENDIX D

SUMMARY OF CME DIRECTORS' SURVEY RESPONSES

Tables: Page D-2

Table D-1: OIG survey sample size and response rate	
	CME Directors
Sample Size	119
Number of Respondents	79
Response Rate	66.4%

Table D-2: Awareness of the CDP	
	CME Directors (n=79)
Very familiar	11%
Somewhat familiar, but not sure of all the details	48%
Aware, but didn't know much about it	23%
Not at all aware	18%
Source: OIG survey of medical school CME directors; November 1992	

Table D-3: Sources of information about the CDP	
	CME Directors (n=65)
Received a CDP Statement by mail	82%
Received advanced notice of a conference by mail	59%
Read a CDP Statement in JAMA	25%
Read about the CDP in JAMA	31%
Read a CDP Statement in a specialty journal	6%
Read about the CDP in a specialty journal	2%
Received a CDP Statement at a CME activity, professional society meeting, or conference	19%
Heard about the CDP from colleagues within own institution	17%
Heard about the CDP from colleagues at outside institutions	12%
Read or saw something about the CDP in the popular media	15%

Source: OIG survey of medical school CME directors; November 1992
Note: Excludes those 14 CME directors (18%) who described themselves as "Not at all aware" of the CDP

Table D-4: Awareness of each of 7 sample Consensus Statements	
Statement	**CME Directors** (n=62)
Surgery for Epilepsy	32%
Clinical Use of Botulinum Toxin	29%
Intravenous Immunoglobulin	23%
Adjuvant Therapy for Colon and Rectum Cancer	44%
Early Stage Breast Cancer	52%
Gastrointestinal Surgery for Severe Obesity	45%
Treatment of Panic Disorder	50%

Source: OIG survey of medical school CME directors; November 1992
Note: Excludes those 14 CME directors (18%) who described themselves as "Not at all aware" of the CDP

Table D-5: Awareness of additional Consensus Statements: Percentage reporting that they were aware of Statements not in our sample	
Number of Statements	**Percentage of respondents** (n=65)
none	79%
1	9%
2	5%
3	3%
4	3%
6	1.5%

Source: OIG survey of medical school CME directors; November 1992

Table D-6: Percentage reporting that their institutions address each type of topic in their CME activities	
	CME Directors (n=78)
The results of medical technology assessments	82%
Clinical applications of research	94%
Specialty society practice guidelines/ practice parameters	60%
Source: OIG survey of medical school CME directors: November 1992	

Table D-7: Use of CDP information by CME offices	
a. Percentage reporting that their office plays a role in topic selection for CME activities	82% (n=78)
b. Percentage reporting that they are familiar with the content of the CME activities for which they grant credit	96% (n=79)
c. Percentage of those familiar with the content of their CME activities who were aware of any CME activities sponsored by their institution during the past 3 years that had addressed information from an NIH Consensus Conference	23% (n=75)
d. Percentage of those CME directors who had received a Consensus Statement by mail during the past 3 years who had forwarded it to a member of the CME committee or faculty:	
never	67%
once	4%
2-4 times	19%
5 or more times	1%
not sure	9%
	(n=79)
e. Percentage reporting that a faculty or staff member had approached them during the previous 3 years with a recommendation to offer a CME activity addressing a specific NIH Consensus Conference:	
never	84%
once	6%
2-4 times	5%
5 or more times	0%
not sure	5%
	(n=79)
Source: OIG survey of medical school CME directors; November 1992	

Table D-8: Comments on the CDP

	Very much	Some what	A little	Not at all	N/A
a. the topics addressed in NIH Consensus Conferences are timely	46	33	2	0	19
b. the issues addressed by the CDP are appropriate for resolution through the group judgment method of consensus development	20	51	3	0	26
c. the Consensus Statements usefully distill large bodies of information	37	35	5	0	24
d. the 2-1/2 day format of the NIH Consensus Conferences allows sufficient time to examine and consider the issues in question	18	24	5	2	52
e. the recommendations of the consensus panels are practical	28	30	7	0	36
f. the Consensus Statements are sufficiently directive	25	33	7	0	36
g. the recommendations are directed towards clinical, not just research audiences	38	28	2	0	18
h. NIH sponsorship of the CDP enhances the credibility of the Program's findings	61	20	2	0	18
i. the topics addressed by the CDP are appropriate for incorporation into CME activities	50	31	3	0	16
j. the format in which the findings of Consensus panels are presented are useful for CME activities	18	44	16	0	21

Source: OIG survey of medical school CME directors, November 1992
Note: Excluding those who were not at all aware of the CDP; n varies from 61 to 63 for individual questions; numbers are in percent

Table D-9: Degree of respect for the findings of the CDP				
	Great Respect	Some respect	A little respect	No respect
CME directors	59	38	3	0

Source: OIG survey of medical school CME directors; November 1992
Note: Excludes those who reported that they were Not at all aware of the CDP; n=58

Table D-10: Percentage of CME directors describing each type of material as potentially useful for their CME activities	
	CME Directors
CME curriculum materials for small-group settings	89%
CME curriculum materials for large-group settings	88%
CME curriculum materials for self-directed study	80%
CME curriculum materials for short sessions (eg., 1 hour grand rounds)	-
CME curriculum materials for longer CME activities (1 day conferences/courses)	-
Videotapes of Conference highlights	36%
Videotapes of Conference press conferences	16%
Conference proceedings in booklet form	80%
Reference bibliographies	81%
Complete listing of past CDP topics	80%

Source: OIG survey of medical school CME directors; November 1992
Note: N is based on all 79 CME director respondents, regardless of their level of awareness of the CDP; it ranged from 70 to 75 for individual questions

SURVEY INSTRUMENT: MEDICAL SCHOOL CME DIRECTORS

SECTION A: AWARENESS OF THE NIH CONSENSUS DEVELOPMENT PROGRAM

1. Prior to receiving this survey, how familiar were you with the National Institutes of Health Consensus Development Program (CDP)? Please check one:

	✓
Very familiar	
Somewhat familiar, but not sure of all the details	
Aware, but didn't know much about it	
Not at all aware	

If Not at all aware, then please go to Section B on Page 2. Otherwise, please continue.

2. From what sources have you heard about the CDP during the past three years? Please check all that apply:

SOURCE	✓
a. Received advance notice of at least one upcoming NIH Consensus Conference in the mail	
b. Received at least one NIH Consensus Statement in the mail	
c. Received at least one NIH Consensus Statement at a CME activity, professional society meeting, or conference	
d. Heard about the CDP from colleagues within my institution	
e. Heard about the CDP from colleagues at other institutions	
f. Read about the CDP in *JAMA*	
g. Read about the CDP in a specialty journal. Please specify:	
h. Read or saw something about the CDP in the popular media	
i. Read at least one NIH Consensus Statement in *JAMA*	
j. Read at least one NIH Consensus Statement in a specialty journal. Please specify:	
k. Other. Please specify:	

3. Prior to receiving this survey, were you aware of the following specific Consensus Statements? Please check Yes or No:

TOPIC	YES	NO
a. *Surgery for Epilepsy* (March 1990)		
b. *Clinical Use of Botulinum Toxin* (November 1990)		
c. *Intravenous Immunoglobulin* (May 1990)		
d. *Adjuvant Therapy for Colon and Rectum Cancer* (April 1990)		
e. *Early Stage Breast Cancer* (June 1990)		
f. *Gastrointestinal Surgery for Severe Obesity* (March 1991)		
g. *Treatment of Panic Disorder* (September 1991)		

4. Please list any other specific Consensus Statements of which you are aware:

SECTION B: USE OF NIH CONSENSUS DEVELOPMENT PROGRAM INFORMATION

Medical school CME offices differ in the degree to which they are involved in the selection of topics and development of curricula for the CME activities for which they grant credit. In this section, we ask some questions about how your program operates, and about the use of CDP information at your institution.

1. Does your institution address the following types of topics in CME activities? Please check Yes or No:

	YES	NO
a. The results of medical technology assessments		
b. Clinical applications of research		
c. Specialty society practice guidelines/ practice parameters		

2. Does your CME office play a role in the choice of topics for CME activities for which you grant credit?

Yes ____ No ____

3. Are you familiar with the content of the CME activities for which you grant credit?

Yes ____ No ____

3b. If YES, are you aware of any CME activities sponsored by your institution during the past three years that have addressed information from an NIH Consensus Conference?

Yes ____ No ____

3c. If YES, please list which Consensus Conference (s):

4. How many times in the past three years have you forwarded an NIH Consensus Statement to a member of your CME committee or a member of your faculty for review?

None ____ One ____ 2-4 times ____ 5 or more times ____ Not Sure ____

Which Statement (s)?

4. How many times in the past three years has a member of your institution's faculty or staff approached you with a recommendation to offer a CME activity addressing a specific NIH Consensus Conference?

None ____ One ____ 2-4 times ____ 5 or more times ____ Not Sure ____

Which Statement (s)?

SECTION C: COMMENTS ON THE CDP

1. The opinions of CME and clinical professionals towards the CDP and towards group judgment efforts in general may affect the way in which specific recommendations from the Program are received. In the following table, we ask you to answer several questions by circling a choice on a four-point scale, where 1 = Very Much, 2 = Somewhat, 3 = A Little, and 4 = Not at All. If you are unable to answer a question, please circle Not Applicable, NA.

Please rate the degree to which:	Very Much	Some-what	A Little	Not at All	NA
a. the topics addressed in NIH Consensus Conferences are timely	1	2	3	4	NA
b. the issues addressed by the CDP are appropriate for resolution through the group judgment method of consensus development	1	2	3	4	NA
c. the Consensus Statements usefully distill large bodies of information	1	2	3	4	NA
d. the 2 1/2 day format of the NIH Consensus Conferences allows sufficient time to examine and consider the issues in question	1	2	3	4	NA
e. the recommendations of the consensus panels are practical	1	2	3	4	NA
f. the Consensus Statements are sufficiently directive	1	2	3	4	NA
g. the recommendations are directed towards clinical, not just research audiences	1	2	3	4	NA
h. NIH sponsorship of the CDP enhances the credibility of the Program's findings	1	2	3	4	NA
i. the topics addressed by the CDP are appropriate for incorporation into CME activities	1	2	3	4	NA
j. the format in which the findings of Consensus panels are presented are useful for CME activities	1	2	3	4	NA

2. Please rate your overall degree of respect for the findings of NIH Consensus Development Conferences (circle one):

Great Respect	Some Respect	A little Respect	No Respect
1	2	3	4

SECTION D: CME ACTIVITIES

In this section, we ask how NIH might make information from the NIH Consensus Development Program more useful for CME activities.

1. Would it be useful if NIH made the following materials related to Consensus Development Program topics available for your use in CME activities? Please check Yes or No:

MATERIAL	YES	NO
a. CME curriculum materials for small group settings		
b. CME curriculum materials for large group settings		
c. CME curriculum materials for self-directed study		
d. Videotapes of conference highlights		
e. Videotapes of conference press conferences		
f. Conference proceedings in booklet form		
g. Reference bibliographies		
h. Complete listing of past CDP topics		
i. Other: Please specify:		

2. How else might NIH work with medical school CME offices or faculty to facilitate the use of Consensus Development information in CME activities?

3. Please add any additional comments:

SECTION E: RESPONDENT INFORMATION

In order to better understand the responses to our survey questions, we ask a few questions about your educational and professional background. This information will be used solely in aggregate, and will be kept confidential.

Your name: _____

Your title: _____

1. Please note your educational degree (s): _____

2. If you are an M.D., please note your area of specialty: _____

2. How long have you been in the field of CME? _____

3. How long have you been in your current position? _____

Thank you for taking time to complete this survey; we appreciate your assistance. Please return the survey in the enclosed postage-paid envelope to

HHS/OIG/OEI

Tel:
FAX:

APPENDIX E

PUBLIC HEALTH SERVICE
COMMENTS ON THE DRAFT REPORT

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Servic

Rockville MD 20857

DEC 27 1993

MEMORANDUM

From: Deputy Assistant Secretary for Health Management Operations

Subject: Office of Inspector General (OIG) Draft Report "The NIH Consensus Development Program: Dissemination of Findings Through Medical School Continuing Education Activities," OEI-01-91-01760

To: Inspector General, OS

Attached are the Public Health Service comments on the subject OIG draft report. We concur with the recommendations and the National Institutes of Health has taken or plans to take actions to implement them.

Anthony L. Itteilag

Attachment

PUBLIC HEALTH SERVICE (PHS) COMMENTS ON THE OFFICE OF INSPECTOR GENERAL (OIG) DRAFT REPORT "THE NIH CONSENSUS DEVELOPMENT PROGRAM: DISSEMINATION OF FINDINGS THROUGH MEDICAL SCHOOL CONTINUING EDUCATION ACTIVITIES," OEI-01-91-01760

General Comments

The National Institutes of Health (NIH) appreciates the study performed by OIG of an important avenue for information dissemination that could enhance the effectiveness of the Consensus Development Program (CDP). Continuing Medical Education (CME) was identified in previous evaluation studies as an important channel within American medicine that could be better utilized by the CDP. The OIG report reaffirms this observation and suggests several important steps that could be taken by NIH's Office of Medical Applications of Research to clarify medical treatment issues and inform the community of practitioners.

OIG Recommendation

1. The NIH should take steps to increase awareness of the CDP among those responsible for CME. NIH should make special efforts to reach those who sponsor continuing education for general and family physicians.

PHS Comment

We concur. To promote awareness of the CDP, the Office of Medical Applications of Research is in the process of publishing its recently revised and clarified statement of operating guidelines and procedures. The updated procedures will serve to share the results of NIH's growing experience with key persons in the international community of health technology professionals. Special efforts will be made to identify leaders in the CME community and make them aware of the CDP and of NIH's procedures for dissemination of findings.

OIG Recommendation

2. The NIH should identify more effective ways of encouraging the incorporation of consensus findings into continuing education activities.

PHS Comment

We concur. NIH will attempt to identify or create new ways to adapt their materials and exploit the CME activities to reach more practitioners. In this process, NIH will solicit ideas from CME leaders and other professionals, and will consider

developing slides, overheads, and other curriculum materials as suggested in the report.

OIG Recommendation

3. The NIH should strengthen its efforts to understand and address basic concerns about the CDP.

PHS Comment

We agree to continue evaluating the procedures used to initiate a conference, develop a consensus statement, and disseminate the results. NIH will also continue its efforts to evaluate the impact of conferences on medical practice to ascertain which types of conference topics, statement formats, and dissemination efforts have the greatest impact. The concerns expressed by the critical minority of respondents in this OIG study will be considered and assessed seriously.

Technical Comment

Pages 10 to 12. We suggest that the report indicate that the negative views of the CDP that were volunteered by a minority of respondents, while sincerely held, may be inaccurate or based on out-of-date information.

APPENDIX F

NOTES

1. *National Journal*, January 22, 1977, p. 142.

2. "An NIH Overview of a Report of the Council on Health Care Technology of the Institute of Medicine on NIH Consensus Conferences," NIH Coordinating Committee on Assessment and Transfer of Technology, February 10, 1992, p. 3.

   The CDP is administered by the Office of Medical Applications of Research (OMAR), within the Office of the NIH Director; each Conference is cosponsored by OMAR and one or more of NIH's institutes, centers, or divisions. Since its inception, OMAR has conducted almost ninety Consensus Conferences on topics across the spectrum of medical science and practice.

3. The founders of the Program stressed that NIH's role was to facilitate 'technical consensus' on medical technologies, which was defined as "scientific/medical agreement on the scientific facts that a given innovation is deemed optimal and potentially feasible for introduction into practice." The NIH was not to become directly involved in what was termed 'interface consensus' on issues such as cost-effectiveness, patient preference, or ethics. Indeed, NIH administrators expressed a "critical assumption," that "broadened responsibilities [would] not draw NIH into activities inappropriate to its primary research mission." *Responsibilities of NIH at the Health Research/Health Care Interface*, Seymour Perry, MD, Office of the Director, NIH, February 1977, p. A-4, A-2.

   In 1989, Congress also created the Agency for Health Care Policy and Research (AHCPR), within the Public Health Service, to evaluate medical technologies and treatments and to develop practice guidelines.

4. *Guidelines for the Selection and Management of Consensus Development Conferences*, Office of Medical Applications of Research, National Institutes of Health, September 1988, p. 3.

   The NIH develops specialized dissemination strategies for individual Conferences. Dissemination activities include press conferences; press releases; distribution of video highlights of Conferences; coverage in the popular press; publication of Statements in both general and specialty medical journals; and direct mailing of Statements to physicians, hospitals, medical schools, third-party payers, policy makers, continuing medical education programs, and others. In addition to maintaining a mailing list of standard contacts, NIH also purchases targeted mailing lists from relevant specialty societies and other groups for individual Conferences. The NIH does not target medical school department

chairs as a discrete category (OMAR Director of Communications, Personal Communication with the OIG, October 14, 1992).

5. *Information Dissemination to Health Care Practitioners and Policymakers: Annotated Bibliography*, Agency for Health Care Policy and Research (AHCPR), Public Health Service, U.S. Department of Health and Human Services, April 1992, p. 1.

6. The most prominent of these have been funded by NIH itself, and include:

   Evaluation of the NIH Consensus Development Process, Paul Wortman, Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, University of Michigan, 1982.

   Changing Medical Practice through Technology Assessment: An Evaluation of the NIH Consensus Development Program, David Kanouse, et al., Rand Corporation, March 1989.

   Consensus Development at the NIH: Improving the Program, Committee to Improve the NIH Consensus Development Program, Council on Health Care Technology, Institute of Medicine (IOM), 1990.

   The OMAR has also conducted several smaller evaluation projects, including an examination of the role of medical opinion leaders in the diffusion of medical innovations (*Expert Panel Meeting Summary: The Role of Medical Opinion Leaders in Disseminating Consensus Development Conference Recommendations*, January 31, 1989) and a series of focus groups with practicing physicians on their attitudes towards the CDP (*Physician Focus Groups to Identify Strategies for Dissemination of Consensus Development Statements*, June 1990). The focus group report noted that "more information concerning the specific topic of physician awareness and perception of [Consensus] statements is needed." *NIH Physician Focus Groups*, p. 3.

7. Rand, p. 244. The report oversight committee further urged that "reaching these primary care physicians should have high priority" (p. x).

   The NIH plans to target generalist physicians and internists in an upcoming series of surveys regarding practice patterns and awareness of Consensus findings. The NIH will survey them regarding every Conference, because "they are more likely to be first in contact with patients with the disorder." *OMAR Quick-Launch Physician Practice Survey*, NIH Clearance Package submitted to the Office of Management and Budget (OMB), September 1991, p. 32.

8. Rand p. 245, p. 233. The study found that CME courses, conferences, and meetings were rated by responding physicians as the most important information sources for both *first hearing about* and *deciding to use* a new

procedure. It also noted that the extent of participation in CME was "the single most important predictor of whether physicians are aware of specific conference recommendations" (p. xiii, p. 97).

9. *NIH Physician Focus Groups*, p. 9.

10. Continuing Medical Education: A Primer, Alliance for Continuing Medical Education, 1992, p. 96.

Administrators at NIH noted at the time of the CDP's founding that "medical school teaching hospitals and main disease research centers currently represent the most effective transfer points for the movement of research knowledge into health practice," and that "any proposed solutions to the dissemination problem will have to utilize these strengths already in place." Perry, appendix A-1, A-3.

The Rand study also determined that medical schools were one of the two most important sources of CME for doctors who were aware of the Program; local hospitals were the other most important source (p. 95).

11. David Kanouse, Rand Corporation, personal communication with the OIG, October 9, 1992.

12. Van Harrison, Ph.D., Director of CME, University of Michigan, personal communication with the OIG, October 16, 1992.

The OMAR has identified "opinion leaders" as people holding "positions of leadership," or having "high status title, rank, or office." *The Role Of Medical Opinion Leaders*, p. 4, 6.

Rand also found that medical school faculty members were more likely than the average physician to be aware of the Program and were among those most likely to first hear about CDP information (p. 72).

13. Rand, p. 101.

Everett M. Rogers, Diffusion of Innovations, 3rd ed., Free Press, New York, 1983, p. 331.

14. Rand, p. 245.

15. The impact of CME on physician behavior is a matter of considerable controversy. Many researchers have suggested that reimbursement, discipline, quality-assurance, and peer-review activities have greater effect on physician behavior. This report does not address such questions.

Furthermore, this report does not explore the issue of getting doctors into CME. As an NIH administrator noted at the time of the founding of the

Consensus Program, "while the results of consensus building should be useful in meeting continuing education needs of physicians and other health professionals, this process will not resolve the problem of individuals who are unable or unwilling to involve themselves in such activities." Perry, p. 9.

16. We asked family physicians about four topics, oncologists about three topics, and neurologists about two topics. The topics were surgery for epilepsy, clinical use of botulinum toxin, intravenous immunoglobulin, adjuvant therapy for colon and rectum cancer, early stage breast cancer, gastrointestinal surgery for severe obesity, and treatment of panic disorder. Each of these had been the subject of an NIH Consensus Conference held in 1990 or 1991. Members of each group were asked only about the Statements that were relevant to their field (see appendix A for a listing of the Statements and their audiences).

17. Of those who reported that their departments' relevant CME activities had *definitely not* addressed the Consensus findings, one informed us that the activity had been conducted prior to the given Conference; two informed us that they were not aware of the relevant Consensus Statement at the time of the activity. Several others were unable to say exactly when their relevant CME activity had been held, but told us that they would not have incorporated the Consensus findings into the activity at any time because they were unaware of it, did not agree with it, or did not consider it appropriate for CME.

18. We did not ask respondents how many people had been reached in these CME activities; it would not have been feasible for them to access such information.

19. These figures are considerably higher than those reported by Rand researchers for a survey they conducted of randomly chosen physicians in all settings (Rand, p. 71). The groups that we surveyed, however, represent key opinion leaders in their respective fields. Considering their importance, we regard their level of familiarity with the Program as limited. Furthermore, we expect that the level of awareness of the Program among physicians in community settings is likely to be considerably lower than that of these academic groups.

20. We also asked department chairs if they were familiar with any <u>additional</u> Consensus Statements, other than the 7 in our sample; 72 percent of all department chairs (including 72 percent of each specialty group) reported that they were not. Only 9 percent were aware of 2 or more additional statements.

21. These figures may somewhat underestimate total awareness of specific Statements and specific recommendations in those Statements, as people generally separate the 'message' from the 'messenger' and forget the latter over time. We did not measure awareness of--or conformity to--the specific recommendations made by NIH Consensus Panels.

One family medicine chair with whom we spoke pointed out that NIH may have a difficult time gaining name recognition for the CDP because of the

recent proliferation of medical technology assessment efforts; he described the result of these different programs as a "cacophony of parameters."

22. We found wide-ranging opinions regarding the relative value of direct-mailings and journals as vehicles for disseminating CDP information; these reflect, in part, differing information habits among doctors. In our interviews, some department chairs told us that direct mail was the only way to reach them; they miss things published in journals. Others assured us, however, that publishing is the only way to get to them; as one put it, "I receive three feet of mail a week and throw most of it away unread."

23. Of the 82 percent of CME directors who had received at least one Consensus Statement in the mail during the previous 3 years, 57 percent had never forwarded a Statement to a member of their CME committee or other faculty for review.

24. As would be expected, family physicians were much more likely to have heard about the Program or read a Statement in JAMA than were other specialists; the reverse was also true with regard to specialty journals (see appendix C, table C-3).

25. Other sources of information about the CDP and specific Conferences included:

Colleagues: The NIH working group on the role of medical opinion leaders in information dissemination predicted that opinion leaders are more likely than the average doctor to hear about Consensus recommendations from colleagues outside their own institutions. This appears to be more true of oncologists and neurologists than of family physicians: Only 15 percent of family medicine chairs, but 21 percent of neurology and 33 percent of oncology chairs had heard about the CDP from colleagues at outside institutions.

Popular media: The popular media was not a major source of information about the Program: Only 16 percent of department chairs had heard about the Program through the written or print popular media--ranging from 4 percent of neurology chairs, to 18 percent of family medicine chairs, to 23 percent of oncology chairs.

Continuing Medical Education: Twenty-eight percent of department chairs reported that they had attended a CME activity sponsored by an organization other than their own medical school that had addressed the findings of an NIH Consensus Conference--ranging from 14 percent of family medicine chairs to 44 percent of oncology chairs. Of these, 85 percent had attended such activities sponsored by national specialty societies, and 30 percent had attended such activities sponsored by other medical schools or teaching hospitals (see appendix C, tables C-12 and C-13).

26. The Rand study suggested that video coverage of Consensus Conferences, particularly of the press conferences, could be valuable for CME activities (p. 245). Our findings do not bear this out for medical school CME programs. Video tapes of the press conferences received the lowest rating for usefulness in CME, 9 percent. Video tapes of conference highlights received the second-lowest rating, 42 percent. A number of respondents noted that they do not have the time or desire to sit and watch a video; they prefer either a quick summary to read alone, or interactive materials to use in a group.

27. Several respondents also recommended more ambitious--and expensive--efforts on the part of NIH. In particular, a number recommended that NIH directly sponsor, and finance, local CME activities and/or provide visiting speakers. One respondent recommended the preparation of case examples and pre- and post-tests to facilitate the development of CME programs.

28. Ninety-three percent of those department chairs who were familiar with the CDP expressed some degree of respect for its findings--49 percent voiced great respect, ranging from 38 percent of family medicine chairs, to 44 percent of oncology chairs, to 65 percent of neurology chairs. Sixty-three percent also strongly agreed that NIH sponsorship of the program enhances the credibility of its findings (see appendix C, table C-14, C-15).

29. University of Michigan researchers also identified the problem of "selection bias" in the choice of Conference topics and panelists as a potential "threat to the credibility" of the Program. The comments we received from department chairs suggest that their concerns regarding this issue persist.

Wortman, Paul, et. al., "Do Consensus Conferences Work? A Process Evaluation of the NIH Consensus Development Program," *Journal of Health Politics, Policy, and Law*, vol. 13, no. 3, Fall 1988.

30. Even among some specialists in oncology and neurology, there was concern about too great a subspecialty focus. One radiation oncologist, for example, objected to the 'overrepresentation' of medical oncologists vs. surgical and radiation oncologists.

31. One family physician argued that "NIH has to get into the trenches with the people who are going to use this information, rather than bypassing them. NIH has traditionally been antagonistic towards family physicians, and then it wonders why it can't reach them."

32. Again, we believe that the fact that 69 percent of department chairs do not strongly regard the length of Consensus Conferences as adequate may well serve as a barrier to greater use NIH Consensus findings in their CME activities.

33. Typical comments were: "'consensus' is not the same as correct," and "consensus is not necessarily equal to state of the art and not necessarily widely applicable." As one respondent described this view, "you have one consensus and then three months later you have another consensus;" medicine is always in a state of flux.

34. An oncologist also asked, "can individuals not knowledgeable about the area under study truly contribute to consensus development?" Another argued, "the information is generally available. Most conferences and clinicians review the original data and journal reviews and draw their own conclusions; why should an academic clinician care what these non-experts say?"

    Some respondents expressed doubts that any panel could objectively arrive at a consensus of opinion that would be adequately grounded in fact. As one expressed this sentiment, "the process can be self-serving and represent primarily the viewpoint of a few individuals with vested interests rather than a consensus of the scientific community after it has had an opportunity to review the data in the scientific, peer-reviewed literature."

35. *The Physician's Recognition Award: 1991 Information Booklet*, American Medical Association, 1991.

36. In our survey, 62 percent of department chairs reported that they are *very* involved in the selection of topics for CME activities; another 32 percent reported that they were *somewhat* involved. In addition, 52 percent of the department chairs who were familiar with the CDP rated the topics addressed in Consensus Conferences as very appropriate for incorporation into CME activities--ranging from 38 percent of family medicine chairs to about 57 percent of both neurology and oncology chairs.

37. Although 83 percent of CME directors reported in our survey that their offices play a role in the selection of topics for CME activities, this role tends to be limited. For example, 96 percent of CME directors reported that they were familiar with the content of the CME activities for which they grant credit, but only 23 percent of these were aware of a CME activity at their institution that had addressed findings from a Consensus Conference. This number is much lower than that reported by the chairs of individual departments.