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*Study of Physician Recruitment and
Retention in the Indian Health Service*

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Draft Final Report

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Draft Final Report
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The Indian Health Service (IHS) experiences very high rates of turnover among the recruited physicians. The turnover phenomenon is a longstanding and costly problem for the IHS. In the fall of 1990, the IHS contracted with Abt Associates Inc. (AAI) to design a study of the retention problem. This report outlines the steps that AAI took in the design phase of a survey program that will:

- identify potential policy interventions that could reduce the high turnover rate, and
- quantify the impact of different strategies.

The survey program will accomplish these two goals by asking physicians currently employed by the Indian Health Service as well as past employees about their opinions on key issues.

Because physician surveys are costly, the expense of collecting and analyzing new data must be justified by the expectation that significant benefits will accrue from the activity. There is sufficient justification for a major survey effort. Annual turnover rates among IHS physicians are in excess of 20%. Turnover is costly for the IHS for a number of reasons, most importantly because high training and administrative costs are incurred as each new employee learns how to deliver care to beneficiaries in the IHS. Lowering the turnover rate would reduce costs substantially. Concern for reducing these costs led to surveys of IHS physicians in 1980 and 1982. No new data have been collected since then.

This report is divided into four sections. Section I reviews relevant aspects of the previous studies of IHS physician turnover. The second section discusses sampling issues associated with two separate populations of interest: current IHS physicians and those who left the IHS during the past five years. Section III describes the process of questionnaire

development and presents the results of a pretest AAI conducted for each survey instrument. The final section discusses some of the known budgetary issues for Phase II of the study.

I. Results from Previous Studies

In 1980, the IHS undertook a survey with many of the goals described above. The survey was mailed to all IHS physicians. While the questionnaire was sent to all physicians involved in direct patient care for the IHS, it was primarily designed to ask questions that were relevant only to physicians currently practicing clinical medicine at least 50 percent of the time. Consequently, a total of only 467 responses were analyzed. These patient care respondents were assigned to two different "practice setting" groups based on the amount of time they spent in direct patient care as well as the size of facility in which they were principally employed (based on the number of beds in the facility). The first group included those physicians (n=332) providing direct patient care at least 50 percent of the time in a small facility (one with less than 90 beds). The second group was composed of those physicians (n= 135) who provided direct patient care at least 50 percent of the time in a facility with more than 90 beds. Analyses were performed on the responses of both groups together, as well as on each group separately.

One of the questions included on the 1980 survey was the central question cited above: "In your opinion, what should the Indian Health Service do to improve physician retention?" Overall, the top three responses to this question were:

- increase/improve pay and benefits (47%),
- increase/improve support personnel (28 %), and
- decrease bureaucratic obstruction (20%).

These three issues that were, in some sense, controllable by the IHS were not the only reasons cited by respondents as important determinants of retention. In response to a separate question, for instance, respondents indicated that professional isolation was the key factor that would induce them to leave the IHS.

Problems of professional isolation were, of course, more significant for the group of physicians providing care in small, isolated facilities. In addition to feelings of isolation, these physicians were much more likely to express concerns about the quality of care they were providing than respondents in large medical centers. About one half of the respondents in small facilities and one quarter of those in large facilities cited quality of care as a factor that would induce them to leave the IHS. The respondents in small facilities were also more likely to cite bureaucratic obstruction problems.

The problem of social isolation also posed a significant retention challenge for the IHS. A large percentage of respondents (34%) indicated that the lack of opportunity to meet people the same age with similar interests was an important factor in their retention decision. An even larger percentage (41%) cited avocational/vocational interests of a spouse as important considerations in leaving. Not surprisingly, the problems of professional and personal isolation were more important for those respondents in the small, more isolated facilities.

The 1982 survey was implemented by the Recruitment Branch of the IHS to address the substantial rise in the number of physicians reportedly planning to leave the IHS in that year. This survey, mailed to 554 IHS physicians and returned by 497 of them (90% response rate), contained a subset of the 1980 questions which asked respondents to state whether a particular issue was influencing their decisions to remain with or leave the IHS. The responses to this survey were used to determine which issues had the greatest influence on these retention decisions and to detect any changes in physicians' attitudes toward the IHS since 1980.

The results of the 1982 survey indicated a deterioration in the morale of the IHS physicians since 1980. While clinicians seemed less concerned with factors related to salary and to opportunities for their families, they had relatively greater concerns for the quality of the health care they could provide at IHS facilities. In fact, the most frequently mentioned factor contributing to physician dissatisfaction in 1982 was the lack of staff and equipment available for the provision of basic health care. In addition, a large number of physicians expressed increased disappointment both with the priorities and policies of the IHS management and the quality of the IHS administrative staff.

These two surveys clearly identified problems that existed in the early 1980s. The severity of the problems varied significantly with the location of the provider. Additional problems were noted in specific medical and surgical specialties. Survey design considerations must account for each of these issues and insure that there are sufficient numbers of respondents to address the concerns that are particular to isolated areas and specific specialties.

One limitation of the analysis that was performed with the 1980/82 survey data should be noted. Asking respondents to tell which factors might influence them to leave the IHS may have led them to answer strategically. Physicians who have no intention to leave may have described their concerns in dramatic ways in an effort to change a policy that they dislike. It is important to distinguish between the responses of physicians who actually leave the service and those who complain but stay. This will be possible with new survey data if administrative records can be matched to the respondent. If this matching is undesirable because of the potential problem with confidentiality, then it will be important to include and analyze questionnaire data relating to continued service in the IHS.

II. Sampling Issues

Learning about recruitment and retention of physicians requires information from three groups. Current employees can tell why they joined, how they feel about their experience in the IHS, and whether they plan to stay (or how long they will stay). Previous employees can describe why they left, and if they remember, they can provide information similar to that collected from the current employees. The final group of physicians that should be surveyed are potential IHS employees. These physicians, typically residents, can describe what they know about the IHS, how they learned it, and what factors influence their decision to join. A number of considerations, described below, will be important in planning for samples of physicians in each of these groups.

A. Current IHS Physicians

In 1980 the IHS surveyed all of the physicians then employed. The questionnaire was designed primarily for those engaged in patient care, but all physicians were invited to

respond. This census of physicians is more costly than a carefully constructed random sample but it has additional benefits that recommend it. A census asks for the opinions of all physicians. No one will feel excluded if the IHS follows this approach. Alternatively, all physicians will experience the burden of responding to the questionnaire.

In fact, the disadvantage of the census approach is that it represents overkill. More data are collected than are needed to detect policy-relevant differences among physicians. For example, the 1980/82 surveys were used to analyze the differences between physicians in small isolated facilities and those in large urban medical centers. Of the respondents, the group working in isolated facilities was roughly twice as large as the group working in medical centers. Depending on the numbers of physicians involved and the question that is to be analyzed, it may be more efficient to survey some percentage of each group. Similarly, variations by specialty have been noted in recruitment and retention analyses. It will be important in designing a random sample to assure that a sufficient number of respondents are family practitioners and obstetrician/gynecologists, the specialties currently of greatest concern.

We will review IHS administrative records to determine how much detail exists for each physician and propose a specific sampling strategy if the Task Order Director believes that the disadvantages of a census make sampling more desirable. If, for reasons of morale, conducting a census appears to be important, we will outline some of the cost consequences of a census.

B. Previous IHS Physicians

The people who know the most about why physicians leave the IHS are probably the people who have actually left. An important component of a study of IHS retention problems should be a survey of this group. The goal for this part of the survey is to learn what motivated them to leave. On one level it is possible to understand a physician's decision to leave the IHS as a disparity between the rewards of the current job and expectations about medical career opportunities outside the IHS. Those expectations can be measured in surveys of current employees, but for that group it is difficult to distinguish the seriousness of the disparity between current reality and expected life outside IHS. The

proposed survey of previous employees is addressed to a group that felt strongly enough to act. By contacting them now, the IHS can determine if the non-IHS alternatives they found were as good as expected. Similarly, with some additional time, their perspective on the quality of medical practice in the IHS may have changed.

We can identify the universe of physicians who have left the IHS during the past five years from personnel records and sample names from that group. Limiting the time span in this way has benefits. Most important, the factors that caused these physicians to leave will still be fresh in their memories. In order to minimize survey program costs, the sample should be limited to those physicians who stayed in the federal service after leaving the IHS. Contacting current federal employees is feasible and does not require approval from the Office of Management and Budget.

C. Resident Physicians

We considered a third group of physicians that could be contacted as part of a comprehensive survey of physicians: potential IHS employees. The most immediate recruiting source is the pool of current physicians-in-training. The results of focus groups conducted with current IHS physicians, and a review of the costs associated with a third survey led us to abandon the idea of a resident physician survey.

III. Questionnaire Development

This section presents the results of a pretest of two questionnaires developed for the Study of Physician Recruitment and Retention in the Indian Health Service (IHS), conducted for the IHS by Abt Associates Inc. (AAI).

As an initial step in instrument development, a meeting was held on October 23, 1990 with AAI and IHS project staff, and physicians in the IHS and other Federal agencies. In addition, two focus groups were conducted with IHS physicians working in a facility in Arizona. These discussions yielded a substantial list of issues which influence physicians' decisions to stay in or leave the IHS. Based on subsequent discussions with IHS staff, we developed a strategy of asking for a respondent's opinion about a particular topic--for example, housing--and then asking about the importance of that topic in a decision to remain

in the IHS or leave for another type of employment. Initial drafts of the questionnaire were reviewed by AAI project staff as well as by IHS staff and the participants from the October meeting. During this review, it was determined to pretest two questionnaires, one for physicians currently in the Indian Health Service and one for physicians who have left the Service (Exhibits A and B).

The main goal of this pretest is an assessment of the reliability and validity of these questionnaires. Most of the items ask physicians for their personal evaluation of various factors that might influence decisions about IHS employment. In this situation, we have no external source of information that we can use to verify the physicians' responses. Instead, our assessment of the reliability and validity of the instruments must rely on physician reports of how well they understand the purpose and importance of the study, how they interpret questions, and whether they believe the questionnaire addresses major issues that affect their tenure with the IHS. In order to collect these reports, a telephone interview was designed to follow the completion of the questionnaires by physician respondents. During the telephone interview (Exhibit C), we asked about the perceived importance of the survey, whether the particular items were understandable, and whether any factors salient to IHS tenure had been overlooked. Our assumption is that if the physician respondents believe the survey to be worthwhile, the questions unambiguous, and the survey comprehensive, they will provide reliable and valid data.

A. Pretest Procedures

The design for the proposed main study will call for a self-administered questionnaire to be mailed to all physicians currently in the IHS and a sample of physicians who have left the IHS but are still employed by the Federal government. These questionnaires will be accompanied by a cover letter explaining the purpose of the study and providing assurances of confidentiality. In order to encourage a high response rate for the survey, these initial contacts will be followed additional mailings and, if necessary, telephone interviews.

In this pretest, however, our objective was an evaluation of the questionnaires rather than of procedures to encourage participation. For this reason, and because of the project schedule, we did not concentrate on obtaining responses from a high proportion of the pretest

sample. If a physician refused to participate, or, more likely, was not available during the pretest field period, we simply made a fresh attempt with a different physician.

The pretest sample consisted of 27 physicians, 15 selected from rosters of current IHS physicians and 12 from lists of former IHS physicians. On Wednesday, April 17, physicians in each group were mailed the corresponding version of the questionnaire along with a letter requesting that they complete the survey. The letter also explained that an AAI interviewer would be telephoning them with a few questions about the survey forms. (The cover letter is included in Exhibit A; the same letter was sent with both versions of the questionnaire.) In the following week, AAI project staff began telephoning to make sure each sample member had received a questionnaire and to arrange appointments for the telephone interview. Our final telephone interview was completed on May 3.

B. Pretest Results

Field Report We completed interviews with 6 of the 15 IHS physicians in the sample and with 6 of the 12 physicians who had left the Service. Among the non-respondents in the IHS portion of the sample, 5 were unavailable during the pretest field period (that is, on leave or unable to be reached by telephone), 3 had left the IHS, only 1 physician refused to participate, explaining that he felt he could not convey his experiences in the IHS through a standardized questionnaire. All six of the non-respondents who had left the Service were not available during the field period.

Telephone Interview All of the physicians interviewed indicated that the study was worthwhile, with responses ranging from the emphatic--“Yes, absolutely necessary”--to the somewhat cautious--“Yes, if they’re going to use the information to make changes.” Most respondents felt that the items themselves, the instructions, and the format of the questionnaire were understandable and easy to follow. The time reported to complete the questionnaire ranged from 7 minutes to an hour; most reported about 15 minutes. Based on these comments, we can conclude that response burden is minimal and that physicians feel it is worth their effort to complete the survey.

Although most of the respondents felt that the questionnaire should not be any longer than its current length (8 pages for physicians in the Service, 7 pages for physicians who had

left), almost all had ideas for expanding the survey to cover one or another area in more depth. In most of these instances, it seemed that respondents wanted to elaborate on items in the questionnaire. For example, one respondent commented that the cultural isolation of IHS physicians should have more emphasis. Another felt that the study was "trying to get at very complex information with a relatively simple survey" and felt that the survey did not capture the real reason why physicians "check out." His point was that in a variety of ways, IHS physicians found themselves "serving the government rather than serving the people." A third respondent felt that management issues in the IHS were unique to the organization and suggested that the IHS should try to tease out the real issues behind dissatisfaction with IHS management.

When interviewers probed comments about dissatisfaction with the IHS, several themes emerged. A respondent who had been in the IHS for 17 years noted that the Service had become more bureaucratized; at the beginning of his tenure, "it was a rebel organization, attracted individuals who could get responsibility early in their career," but now, "the feeling of physicians that they have the ability to bring about change has greatly diminished." A comment that "administration is not done locally, takes a long time, and is one of the serious problems that they have" echoes this sentiment.

IHS preference in hiring Native Americans was mentioned by several respondents. This seems to be a two-pronged issue. First, non-Indian physicians felt that their own opportunities for advancement were hampered: "Indian preference hiring gives no chance for advancement." Second, respondents felt that the policy made it difficult to hire and retain non-medical staff: "Reduces staff development, leads to frustration, anger; don't always get the most qualified personnel." The physicians that commented on the preference policy seemed to feel caught in the middle between tribal administration and the IHS: "Tribe makes demands which can't always be fulfilled, and there's little support in the IHS hierarchy."

Another type of criticism of the questionnaire was voiced by physicians who had spent many years in the Service during a period when the IHS had, in their perception, changed dramatically. One respondent, for example, stated: "I had many stages in my stay with the IHS. Some of the questions are difficult to respond to -- what stage are you talking about?...If the study is point relevant (e.g., a look at those who left in 1977) then this is fine. But if the sample is people who left in different years, this will be a problem." Also,

another respondent made the point that she felt differently about the IHS at different times in her career: "Administrative support was great before I had my child, bad afterwards. Importance and how various features rate may change, depending on point in career. [You should] emphasize physicians should rate the factors' general importance to them."

Finally, in addition to completing the self-administered questionnaire and the telephone interview, one respondent sent a letter that included a critique of the questionnaire for physicians who had left the IHS. In particular, he pointed out that Item 2a needs a category to indicate employment with the IHS as a way to fulfill military service obligations. He also commented that, in Item 5, the USPHS Commissioned Corps is generally called the Commissioned Corps rather than the Public Health Service Corps. In reference to Item 6, he suggested that many physicians in the IHS are in both patient care provider roles and clinical administrative roles and the response categories force a respondent to choose one or the other and does not accurately reflect dual work roles in the Service.

C. Responses to Self-Administered Questionnaire.

Among the physicians currently in the IHS, 4 of the 6 entered the Service in the last five years, one entered in 1979 and the remaining physician has been in the IHS since 1959. Specialties represented in this group are Family Practice (3), Pediatrics (2), and General Internal Medicine (1); all of the 6 are board certified. Five report that they are "White? Not of Hispanic Origin" and the remaining respondent reports his ethnic origin as "Other" and wrote "Black and White, Non Hispanic" in the "specify" line. Among the physicians who had left the IHS, 2 entered in the Service in 1967, 2 in 1971, 1 in 1978 and 1 in 1980. Specialties include General/Family Practice (4), Pediatrics (1), and General Internal Medicine (1). Five of the six are not board certified. Two report that they are Native Americans and the remainder are White, not of Hispanic origin.

Both groups provided the full range of responses to the scales that form the main body of each questionnaire. This indicates that the scales are useful instruments in capturing respondents' reactions to the various issues presented.

In all cases, skip patterns in the questionnaire were followed accurately. Very few items were overlooked by respondents.

D. Summary of Pretest

The pretest proved to be very useful. Physicians appear to be willing and able to provide truthful responses to the questions presented in the survey forms. The forms offer a comprehensive list of issues that influence physician retention and attrition, although, as in any statistical summary, certain idiosyncratic features may not be captured.

In response to the concern about the questionnaires capturing experiences that may change during a respondent's tenure in the IHS, we recommend that questions about likes and dislikes be anchored in the previous two years (in the case of current IHS physicians) or in the last two years of IHS tenure (in the case of physicians who have left the IHS).

Preferential hiring of Native Americans and its perceived impact on the quality of IHS employment is a factor that was not addressed specifically in the questionnaire but did emerge in the follow-up telephone calls. We were uncertain about how to respond to this issue. On the one hand, it was a salient issue for 4 of the 12 respondents in the pretest, yet it was never addressed in writing, even on the final open-ended section of the written questionnaire. This suggests that an item concerning this issue might encourage respondents in the main survey to explain their views on the issue of preferential hiring. We speculate, however, that respondents may not be comfortable committing their views to paper. After considerable debate, we concluded that the open-ended question provided an opportunity for those respondents who wanted to address the issue of preferential hiring and that it was not wise to ask for responses to such a sensitive issue, because prompting alone might bias their answers.

IV. Implementation

In this section, we present the broad outlines of the recommended data collection procedures. This description should not be taken as a definitive proposal--it is intended to be only suggestive of the scope of work. We also intend to illustrate how features of survey design can affect the cost of data collection.

Decisions about survey design features are always made within the practical constraints of schedules and budgets. In addition, one must keep in mind how the data collected

will be used in a research program. Were time and money unlimited, IHS might consider an approach where each physician is personally interviewed so that his or her unique experiences could be fully explored and documented. However, not only is this approach impractically expensive, the life stories IHS physicians collected in this free form manner would present an immense data reduction task for an analyst looking for common themes in the reasons physicians either stay in or leave the Service.

The results of our pretest demonstrate that useful information concerning physicians' IHS experiences can be obtained through a standardized, self-administered questionnaire. A mail survey compares quite favorably in cost to a personal interview survey for obvious reasons. Labor costs of interviewers and the expenses associated with travel are avoided altogether.

A major drawback of mail surveys, however, is the low response rates which they typically yield. For reasons explained in the Pretest Report, the study could not address this issue directly. While the respondents in the pretest were cooperative, the design for the full-scale survey should include procedures to encourage reluctant respondents and identify and convert initial refusals. We believe that a mixed-method approach combining mail questionnaires and telephone interviewing is a practical, cost-effective solution to nonresponse.

In mail surveys, nonresponse can happen for a variety of reasons. Physicians in the sample may not receive the initial mailing because addresses are out-of-date, pieces of mail can be misdirected or lost enroute to a facility or even lost within a facility's inter-office mail system. Even if the mail is received, potential respondents may have questions about the intent of the study or the interpretation of items or instructions that can inhibit an immediate response to the survey. A physician might lay the questionnaire aside in order to give more thoughtful answers and then not return to the survey task. Finally, the physicians may simply refuse to participate, feeling for one reason or another that filling out the questionnaire is a waste of time. Even in our relatively small pretest, we experienced such reasons for non-participation.

In our experience, telephone prompting calls are an effective way to diagnose initial nonresponse, and we recommend this tactic for full-scale survey. In these calls, interviewers can identify situations where a physician has moved from the address on the mailing label

and, in most instances, can obtain a forwarding address and telephone number. In instances where the address is correct but the physicians still did not receive the questionnaire, an interviewer can promptly mail a replacement questionnaire or send a copy by facsimile machine. The interaction between interviewer and potential respondent is more important in the cases where the questionnaire arrived but the physician has put off completing and returning the form. Interviewers are trained to deal effectively with each respondent's questions and can often encourage the reluctant respondent to fill out the form. Although we anticipate that actual interviews conducted by telephone would be rare in the full-scale survey, in some instances it may be the only practical way to collect the necessary data. The questionnaire is short and it would not be difficult to adapt to a telephone mode of administration.

We envision the field period to begin with a mailing of the questionnaire and cover letter to the physicians selected for the study. In the following week, we would begin a round of telephone prompting calls. While we might complete some interviews by telephone at this stage, it would not be encouraged. Rather the purpose of these calls is to verify receipt of the questionnaire and request that the physicians complete and return the form quickly. If necessary, questionnaires would be remailed to verified addresses. This round of prompting calls would take about two weeks to complete and would end about three weeks after the initial mailout. Our experience indicates that, unprompted, about 30% of the initial mailout can be expected to respond to the initial mailout. The prompting calls can increase this rate as much as 15 percentage points. Keeping in mind the 90% completion rate obtained by mail alone in the 1980 study conducted by the IHS, we are optimistic that participation rates would be higher on the full-scale study. By the third week of the field period, we could expect about 50%-55% of the physicians to have returned the questionnaires. Post cards would be mailed to the remainder and would be expected to yield another 10%-15%. By the end of the sixth week, it is reasonable to anticipate that 60%-70% of the cases are complete. At this point, we would begin telephone calls, again to serve as prompts but, in this second round, we would encourage completion of the form by telephone. The combination of the prompting effect and the completion of telephone interviews would be expected to yield a final response rate of 80%-85% by the tenth week of the field period. This final response is lower than the figure achieved in the 1980 study. Our estimate is cautious because survey research firms have experienced a decline in physician participation

in data collection projects during this period.' It may well be the case that IHS physicians will not follow this general trend and, if so, higher responses rates would be obtained.

Exhibit A
Self-Administered Questionnaire for
Physicians Currently Employed by the Indian Health Service

Draft May 18, 1991

**Survey of
Indian Health Service Physicians**

The first few questions are about your experiences and current medical practice in the Indian Health Service (IHS) and your future plans.

1. When did you first enter the IHS?

Month ___|___ Year ___|___

2. When you first entered the IHS, did you have a service obligation that could be fulfilled by serving in the IHS?

Yes	1 GO TO 2a - b
No	2 G O T O 3

2a. What was the type of this service obligation?

National Health Service Commissioned Corps (NHSC)	1
Indian Health Service (IHS)	2
Other Service Residency Program	3
Loan Repayment Program	4
Other (Specify) _____	5

2b. What was the period of this obligation in months?

Number of Months ___|___

2c. What was/is the ending date of your obligation?

Month _ | _ Year _ | _

IF PERIOD OF OBLIGATION IS NOT YET OVER, PLEASE ANSWER 2d

2d. Do you plan to serve beyond your obligation?

Yes	1
No	2

3. What medical specialties do you currently practice?

Primary Specialty _____

Secondary Specialty _____

4. Are you board certified in the primary specialty listed above?

Yes	1	GO TO 5
No	2	GO TO 4a

4a. Do you plan to take the board certifying exam in your specialty within the next two years?

Yes	1
No	2

5. Are you a member of the Public Health Service Commissioned Corps or a Civil Service employee of the IHS?

Public Health Service Commissioned Corps	1
Civil Service Employee	2

6. What do you consider your primary assignment within the Indian Health Service?

Patient Care Provider	1
Clinical -- Administrative	2
General Administrative	3
Other (Specify)_____	4

7. Are you the clinical director of your IHS facility?

Yes	1
No	2

8. At your facility, does the clinical director significantly influence management decisions?

Yes	1
No	2

9. During your most recent complete week in practice, how many hours did you spend:
- a. Seeing patients in an outpatient clinic _ I _ H r s
 - b. Seeing hospitalized patients _ I _ H r s
 - c. In other patient care activities Hrs | _____
 - d. In non-patient care activities _ _ _ I _ H r s
 - e. Total hours all activities (Should equal the sum of 9a. - 9d.) _ _ | _ H r s

10. Knowing what you know now, would you choose medicine as a profession again?

- Yes** 1
- No 2

11. Knowing what you know now, would you choose to practice medicine in the IHS again?

- Yes** 1
- No 2

12. Do you currently plan to leave the IHS within the next 5 years?

- Yes** 1 GO TO 12a
- No 2 GO TO 13a

12a. When do you plan to leave the IHS?

- Within 1 Year** 1
- Within 2 Years 2
- Within 3 Years 3
- More** than 3 Years 4

25. Have you ever participated in the IHS loan repayment program?

Yes 1 GO TO 25a
No 2 GO TO 27a

25a. What is that maximum amount that could have been repaid?

\$ ____|____|,|____|____|____

<p>26a. How would you rate your reaction to the loan repayment program?</p> <p>5 4 3 2 1</p> <p>Satisfied Dissatisfied</p>	<p>26b. How important is your evaluation of the loan repayment program in your decision to stay with or leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>
<p>27a. How would you rate IHS housing availability?</p> <p>5 4 3 2 1</p> <p>Excellent Poor</p>	<p>27b. How important is housing in your decision to stay with or leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>
<p>28a. How would you rate your local living conditions?</p> <p>5 4 3 2 1</p> <p>Excellent Poor</p>	<p>28b. How important are your living conditions in your decision to stay with or leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>

29. What is your current marital status?

Currently Married/Partnered 1 GO TO 30a
Separated 2 GO TO 31
Divorced 3 GO TO 31
Widowed 4 GOT031
Never Married 5 GOT031

33. How would you describe the community you lived in when you were 16 years old? Would you say it was urban, suburban, or rural (a small town or farm)?

Urban	1
Suburban	2
Rural	3

-
34. Which of these groups best describes your ethnic origin?

White, Not of Hispanic Origin	1
White, of Hispanic Origin	2
Black, Not of Hispanic Origin	3
Black, of Hispanic Origin	4
Asian, Asian American, Pacific Islander	5
American Indian, Alaskan Native	6
Other, (SPECIFY) _____	7

-
35. As a final question, is there anything that could be changed about the Indian Health Service or your assignment in the IHS that would make you more likely to extend your tenure with the service?

Thank you for completing this questionnaire.

Alternate Version of Page 6, Q.29

Exhibit B
Self-Administered Questionnaire for
Physicians Who Have Left the Indian Health Service

5. When you were in the IHS, were you a member of the Public Health Service Commissioned Corps or a Civil Service employee of the IHS?

Public Health Service Commissioned Corps	1
Civil Service Employee	2

-
6. What was your primary assignment within the Indian Health Service?

Patient Care Provider	1
Clinical -- Administrative	2
General Administrative	3
Other (Specify) _____	4

-
7. Were you the clinical director of your IHS facility?

Yes	1
No	2

-
8. Knowing what you know now, would you choose medicine as a profession again?

Yes	1
No	2

-
9. Knowing what you know now, would you choose to practice medicine in the IHS again?

Yes	1
No	2

21. Have you ever participated in the IHS loan repayment program?

- Yes 1 GO TO 21a
- No 2 GO TO 23a

21a. What is that maximum amount that could have been repaid?

\$____|____|,|____|____|____

<p>22a. How would you rate your reaction to the loan repayment program?</p> <p>5 4 3 2 1</p> <p>Satisfied Dissatisfied</p>	<p>22b. How important was your evaluation of the loan repayment program in your decision to leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>
<p>23a. How would you rate IHS housing opportunities?</p> <p>5 4 3 2 1</p> <p>Excellent Poor</p>	<p>23b. How important was housing in your decision to leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>
<p>24a. How would you rate your living conditions while you were in the IHS?</p> <p>5 4 3 2 1</p> <p>Excellent Poor</p>	<p>24b. How important were living conditions in your decision to leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>

25. What was your marital status when you were in the IHS?

- Married/Partnered 1 GO TO 26a
- Separated 2 GO TO 77
- Divorced -3 GO TO 27
- Widowed 4 GO TO 27
- Never Married 5 GO TO 27

31. Which of these groups best describes your ethnic origin?

- | | |
|---|---|
| White, Not of Hispanic Origin | 1 |
| White, of Hispanic Origin | 2 |
| Black, Not of Hispanic Origin | 3 |
| Black, of Hispanic Origin | 4 |
| Asian, Asian American, Pacific Islander | 5 |
| American Indian, Alaskan Native | 6 |
| Other,
(SPECIFY) _____ | 7 |

32. Which of the following best describes your current main practice, that is, the practice where you spend the most hours?

CIRCLE ONLY ONE

- | | | | | | |
|--|-------------------------|---------------------------|-------------------------|--|---|
| PRIVATE SINGLE
SPECIALTY PRACTICE 1 | HOSPITAL/PUBLIC | 4 | ACADEMIC | 7 | |
| PRIVATE MULTI-
SPECIALTY PRACTICE 2 | PUBLIC HEALTH
CLINIC | 5 | RESIDENTIAL
FACILITY | 8 | |
| HOSPITAL/PRIVATE | 3 | COMMUNITY
HEALTHCENTER | 6 | OTHER FEDERAL
SERVICE (eg, VA, PHS) | 9 |
| OTHER | 10 | | | | |

33. Do you consider your current position better or worse than your tenure in the IHS?

- | | |
|--------|---|
| Better | 1 |
| Worse | 3 |

34. How would you compare your current position with your IHS tenure?

Thank you for completing this questionnaire.

Alternate Version of Page 5 Q.25

21. Have you ever participated in the IHS loan repayment program?

- Yes 1 GO TO 21a
- No 2 GO TO 23a

21a. What is that maximum amount that could have been repaid?

\$ ____|____|,|____|____|____

<p>22a. How would you rate your reaction to the loan repayment program?</p> <p>5 4 3 2 1</p> <p>Satisfied Dissatisfied</p>	<p>22b. How important was your evaluation of the loan repayment program in your decision to leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>
<p>23a. How would you rate IHS housing opportunities?</p> <p>5 4 3 2 1</p> <p>Excellent Poor</p>	<p>23b. How important was housing in your decision to leave the IHS?</p> <p>5 4 3 2</p> <p>Important Not Important</p>
<p>24a. How would you rate your living conditions while you were in the IHS?</p> <p>5 4 3 2 1</p> <p>Excellent Poor</p>	<p>24b. How important were living conditions in your decision to leave the IHS?</p> <p>5 4 3 2 1</p> <p>Important Not Important</p>

25. What was your marital status when you were in the IHS?

- Married 1 GO TO 26a
- Living with someone as if you were married 2 GO TO 26a
- Separated 3 GO TO 27
- Divorced 4 GO TO 37
- Widowed 5 GO TO 37
- Never Married 6 GOT027

Exhibit C
Draft Cover Letter

Draft May 18, 1991

Dear Dr.

As you know, the Indian Health Service is responsible for the medical care and treatment of many Native Americans. Physician participation in the IHS is critical to assuring that this important group of Americans are provided access to quality health care.

The IHS needs your help to learn more about the reasons why physicians stay with or leave the Service. The information you provide will be used by the Service to improve physicians' experiences in the Indian Health Service.

As part of the first national survey of IHS physicians since 1982, you have been selected to participate in this important project.

The survey is being conducted by an independent survey research firm, XXX XXXXXXXX-XXX XXX. All information you provide will be kept confidential and will be reported to the IHS only in aggregate form in statistical reports.

Please complete the enclosed questionnaire and return your form in the postage paid envelope.

Thank you for your participation in this important research project. If you have any questions, feel free to call XXXX XXXXXX at (800) 555-5555.

Sincerely,

XXXX X. XXXX
Senior Survey Director