

# THE IHS PRIMARY CARE PROVIDER

A journal for health professionals working with American Indians and Alaska Natives



July 2001

Volume 26, Number 7

## A Reading Literacy Survey at the Phoenix Indian Medical Center

*Margaret E. Holgrem, PharmD Candidate, University of Arizona, Tucson, Arizona; René Roncone, RPh, Associate Professor, University of Arizona College of Pharmacy; Michael B. Fitzpatrick, MPH, Chief, Community Health/Education, Phoenix Indian Medical Center, Phoenix, Arizona; Jane Johnson, PharmD Candidate, University of Arizona (surveyor); and Violet Geza, Pharm D Candidate, Philadelphia College of Pharmacy (surveyor), Philadelphia, Pennsylvania*

### Introduction

Patient information literature is a commonly used and accepted method of supplementing verbal instructions and information provided during clinic and hospital visits. The material is generally intended to help patients and caregivers understand the management of disease states and recommended or necessary care. Unfortunately, these printed materials are often written at reading levels higher than the individual patient's level of literacy.

Healthcare providers at Phoenix Indian Medical Center (PIMC) had expressed concerns regarding patients' abilities to read educational materials given to them at the pharmacy and specialty clinics throughout the hospital. Research has determined that a person's level of literacy contributes to an overall understanding of disease states (both acute and chronic) and necessary care. Past studies have shown that poor reading skills can be associated with poor health.

Unfortunately, many healthcare providers are unable to identify patients with limited reading abilities. A provider may mistakenly think a patient's noncompliance with their regimen is due to a lack of motivation or having a different value system, when in reality the patient is illiterate. Inadequate reading skills often create a barrier to receiving good medical treatment. In an effort to improve patient education, the Patient and Family Education Committee at PIMC conducted a study to assess patient population literacy levels.

### Methods

This study was conducted at Phoenix Indian Medical Center. This 140-bed facility is operated by the United States Public Health Service, and provides a variety of both inpatient and outpatient services. These include many specialty clinics that meet the needs of the American Indian and Alaska Native community. The Phoenix Area Indian Health Service, which includes PIMC, provides healthcare for approximately 140,000 American Indian and Alaska Native (AI/AN) people in Arizona, California, Nevada, and Utah. PIMC provides medical service to members of twenty tribes located throughout Arizona.<sup>6</sup> The actual patient population seen at this facility is difficult to determine. The hospital consistently exceeds one hundred thousand patient visits each year. It should be noted that many patients are seen repeatedly throughout the year as part of their routine health care.

### In this Issue...

- 105 A Reading Literacy Survey at the Phoenix Indian Medical Center
- 111 The Kaiser Family Foundation Native American Health Policy Fellowship Program
- 112 Film About American Indian Veterans' Views About Health Care Available
- 113 Notes from the Elder Care Initiative
- 114 Position Vacancies
- 115 Correction
- 116 Meetings of Interest
- 118 NCME Videotapes Available

From September 2000 through March 2001, 217 patients were asked to take part in a survey. The Phoenix Area Indian Health Service (PAIHS) Institutional Review Board (IRB) reviewed the proposal and deemed this project to be exempt from IRB review, allowing data collection to proceed. No written consent was obtained. The surveyors were instructed to obtain verbal consent prior to administration of the survey.

Patients were approached in a nonrandomized fashion at the various specialty clinics and wards in the hospital. Surveyors conducted the study in the following locations and departments: Surgery Ward; Medical Ward; Dental Clinic; Ear, Nose, and Throat Clinic; Emergency Department; Eye Clinic; Neurology Clinic; Obstetrics Clinic; Primary Care Medicine Clinic; Pediatric Clinic; Physical Therapy Department; Rheumatology Clinic; Surgery Clinic; and Women's Clinic. Each department or clinic was contacted regarding participation and assisted in setting up a semi-private area for the patient interviews. Researchers conducted the interviews on days when an interview area was available.

As anticipated, this arrangement lent itself more towards convenience sampling (i.e., talking with patients who happened to have appointments or were being seen as a "walk-in" patient on the particular day scheduled). Patients were asked to participate after they had checked in for their appointment and were screened by the triage nurse. The survey was administered while the patient was waiting to see a health care practitioner or was otherwise unoccupied. Researchers attempted to collect equal amounts of data from each site visited, and to minimize bias in the selection of patients who were asked to participate.

The Patient and Family Education Committee determined *a priori* that not all patients seen at PIMC speak English, and decided to allow caregivers or family members (those responsible for translating materials to patients) to act as proxy for the patient. Originally, this study was going to allow patients, and parents of patients who were under the age of 18 to participate without written parental consent. Although the IRB did not initially require parental consent, the University of Arizona mandated that parental consent be obtained. Due to the nature of this survey, parental consent would not have been obtainable in all cases. As a result, patients under the age of 18 were excluded from this study. The only other group of patients excluded were those in the Intensive Care Unit (ICU). Prior to beginning the study, it was decided that surveying ICU patients would be an imposition, and that patients released from the ICU were often sent to "step-down" units prior to hospital discharge; these other areas of the hospital were surveyed; therefore we were able to sample some of these patients.

For patients who did not want to participate, researchers asked each of them if he/she would provide some general information. If the patient consented he/she was asked their birth date, whether or not English was the primary language spoken at home, and the last grade of school

they had completed. If the patient provided a reason for not wishing to participate, this information was noted on the survey.

The project was conducted as two separate inquiries. A nonexperimental, descriptive approach was used for this research. The first portion of this project was to determine the patient population's average reading abilities. The Rapid Estimate of Adult Literacy in Medicine (REALM) test was used. According to the test's authors, "The REALM is a reading recognition test that measures a patient's ability to pronounce words in ascending order of difficulty. It is unique among reading recognition tests because all test words are commonly used lay medical terms, making REALM particularly useful for estimating literacy skill in medical settings."<sup>7</sup> It is also considered to be a useful instrument in identifying patients who are likely to read at low levels (below the ninth grade level).<sup>7</sup>

The REALM test consists of a one page (single-sided) list of basic medical terms (See Figure 1). The words are listed in

**Figure 1. Rapid Estimate of Adult Literacy in Medicine (REALM) test**

| <b>RAPID ESTIMATE OF ADULT LITERACY IN MEDICINE<br/>(REALM)<sup>®</sup></b>  |                     |                       |       |              |              |              |           |             |
|--|---------------------|-----------------------|-------|--------------|--------------|--------------|-----------|-------------|
| Terry Davis, PhD • Michael Crouch, MD • Sandy Long, PhD  |                     |                       |       |              |              |              |           |             |
| Patient Name/  | Reading Level _____ |                       |       |              |              |              |           |             |
| Subject # _____  | Date of Birth _____ | Grade Completed _____ |       |              |              |              |           |             |
| Date _____   | Clinic _____        | Examiner _____        |       |              |              |              |           |             |
| List 1   | List 2              | List 3                |       |              |              |              |           |             |
| fat _____  | fatigue _____       | allergic _____        |       |              |              |              |           |             |
| flu _____  | pelvic _____        | menstrual _____       |       |              |              |              |           |             |
| pill _____   | jaundice _____      | testicle _____        |       |              |              |              |           |             |
| dose _____   | infection _____     | colitis _____         |       |              |              |              |           |             |
| eye _____  | exercise _____      | emergency _____       |       |              |              |              |           |             |
| stress _____   | behavior _____      | medication _____      |       |              |              |              |           |             |
| smear _____  | prescription _____  | occupation _____      |       |              |              |              |           |             |
| nerves _____   | notify _____        | sexually _____        |       |              |              |              |           |             |
| germs _____  | gallbladder _____   | alcoholism _____      |       |              |              |              |           |             |
| meals _____  | calories _____      | irritation _____      |       |              |              |              |           |             |
| disease _____  | depression _____    | constipation _____    |       |              |              |              |           |             |
| cancer _____   | miscarraige _____   | gonorrhoea _____      |       |              |              |              |           |             |
| caffeine _____   | pregnancy _____     | inflammatory _____    |       |              |              |              |           |             |
| attack _____   | arthritis _____     | diabetes _____        |       |              |              |              |           |             |
| kidney _____   | nutrition _____     | hepatitis _____       |       |              |              |              |           |             |
| hormones _____   | menopause _____     | antibiotics _____     |       |              |              |              |           |             |
| herpes _____   | appendix _____      | diagnosis _____       |       |              |              |              |           |             |
| seizure _____  | abnormal _____      | potassium _____       |       |              |              |              |           |             |
| bowel _____  | syphilis _____      | anemia _____          |       |              |              |              |           |             |
| asthma _____   | hemorrhoids _____   | obesity _____         |       |              |              |              |           |             |
| rectal _____   | nausea _____        | osteoporosis _____    |       |              |              |              |           |             |
| incest _____   | directed _____      | impetigo _____        |       |              |              |              |           |             |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">SCORE</th> </tr> </thead> <tbody> <tr> <td>List 1 _____</td> </tr> <tr> <td>List 2 _____</td> </tr> <tr> <td>List 3 _____</td> </tr> <tr> <td>Raw _____</td> </tr> <tr> <td>Score _____</td> </tr> </tbody> </table> |                     |                       | SCORE | List 1 _____ | List 2 _____ | List 3 _____ | Raw _____ | Score _____ |
| SCORE  |                     |                       |       |              |              |              |           |             |
| List 1 _____   |                     |                       |       |              |              |              |           |             |
| List 2 _____   |                     |                       |       |              |              |              |           |             |
| List 3 _____   |                     |                       |       |              |              |              |           |             |
| Raw _____  |                     |                       |       |              |              |              |           |             |
| Score _____  |                     |                       |       |              |              |              |           |             |

ascending order of difficulty. The patient is given a copy of the words (printed in large font) and asked to read as many words aloud as possible. At the recommendation of the IRB, the surveyor's instructions for administering the test were altered. The recommendation specifically indicated that the surveyor should enter the term "blank" for a response if the patient was silent for more than five seconds. The IRB felt that most AI/AN would be offended by this approach. Instead, the surveyor instructed patients, before they began, that if they were unable to pronounce a word or did not know the word to simply skip that word and move on to the next word. The surveyor graded the patient on a separate form, and later determined the patient's score (See Figure 2).

For short pieces, test the entire selection. For longer pieces, test at least three randomly selected samples of 100 words each. Do not use introductory paragraphs as part of the sample. Start each sample with the beginning of a paragraph.

Determine the average sentence length (SL) by counting the number of words in the sample and dividing by the number of sentences. Count as a sentence each independent unit of thought that is grammatically independent, i.e., if its end is punctuated by a period, question mark, exclamation point, semicolon

**Figure 2. Rapid Estimate of Adult Literacy in Medicine (REALM) administration and scoring**

| <ol style="list-style-type: none"> <li>1. Give the patient a laminated copy of the REALM and score answers on an unlaminated copy that is attached to a clipboard. Hold the clipboard at an angle so that the patient is not distracted by your scoring procedure. Say:<br/><i>"I want to hear you read as many words as you can from this list. Begin with the first word on List 1 and read aloud. When you come to a word you cannot read, do the best you can or say "blank" and go on to the next word."</i></li> <li>2. If the patient takes more than five seconds on a word, say "blank" and point to the next word, if necessary, to move the patient along. If the patient begins to miss every word, have him/her produce only known words.</li> <li>3. Count as an error any word not attempted or mispronounced. Score by marking a plus after each correct word, a check after each mispronounced word, and a minus after words not attempted. Count as correct any self-corrected word.</li> <li>4. Count the number of correct words for each list and record the numbers in the "SCORE" box. Total the numbers and match the total score with its grade equivalent below.</li> </ol> |                   |   |
|---|-------------------|---|
| Raw Score   | Grade Equivalent  | Implications for Patient Education  |
| 0 - 18  | 3rd Grade & Below | Will not be able to read most low literacy materials; will need repeated oral instructions, materials composed primarily of illustrations, or audio or video tapes. |
| 19 - 44   | 4th to 6th Grade  | Will need low literacy materials; may not be able to read prescription labels.  |
| 45 - 60   | 7th to 8th Grade  | Will struggle with most patient education materials; will not be offended by low literacy materials.  |
| 61 - 66   | High School       | Will be able to read most patient education materials   |

The REALM test has been used since the early 1990s. Studies assessing the test's validity correlate the REALM test results closely with other reading tests. The REALM test correlation to the Slosson Oral Reading Test – Revised (SORT-R) was determined to be 0.96 (P<0.0001).<sup>7</sup> The REALM test also correlates well with the recognition portion of the Peabody Individual Achievement Test – Revised (PIAT-R) with a correlation factor of 0.97 (P<0.0001).<sup>7</sup> The REALM study was chosen due to the ease of administration and length of time necessary to administer the survey. The test requires minimal training to administer, and most patients were able to complete the REALM test in just a few minutes.

The second portion of the study determined the reading levels at which common patient handouts were written. The Flesch method was used to evaluate a total of 37 handouts. The Flesch Method consists of four steps. The February 1980 issue of the American Journal of Hospital Pharmacy<sup>9</sup> published the following instructions:

or colon. In dialogue, count speech tags (e.g., "he said") as part of the quoted sentence.

Determine the word length (WL) by counting all the syllables in the sample as if reading the words aloud. Divide the syllables by the number of words in the sample and multiply by 100.

These indices are then applied to the formula to compute the reading ease (RE):

$$RE = 206.835 - 1.105(SL) - 0.846(WL)$$

A score of 100 means that an item is very easy to read, and a score of zero means the item is unreadable. See Table 1 for the interpretation of the reading ease scores. The Flesch method has been used for over 45 years, and it is considered to be a valid instrument for testing materials' readability levels when written at or above the fifth-grade level. It was chosen because it "predicts levels of reading difficulty without the need for validation

by samples of readers.”<sup>99</sup> The surveyor asked the medical staff at each survey site to point out commonly used pamphlets in their department. The handouts were then evaluated using the Flesch method.

### Results

A total of 217 patients (151 women and 66 men) were asked to take the REALM test. Twenty-three declined to participate after the survey was explained. The non-participants represented 10.59% (23/217) of the total population. Since participation in this survey was voluntary, patients were not obligated to provide any information. However, some did provide the demographic information and others did offer reasons for not wanting to participate. Of the 23 non-participants, 5 stated they had completed high school (or greater), 5 completed the 11<sup>th</sup> grade, one completed 9<sup>th</sup> grade, and the other 12 did not provide this information.

The surveyor recorded the non-participant’s reason for not wishing to take the survey if one was provided. One patient had forgotten her reading glasses and was unable to clearly read the print. Another was awaiting the arrival of another family member and did not have the time. Others did not feel well enough to participate. No patients in the inpatient services (Surgical, Medical, or Obstetrics Wards) were awakened to take the survey. One patient stated that, due to a mental handicap, he found reading very difficult and did not want to participate. The minimum age for participation in this survey was 18 years of age, and four patients who did not meet this criterion were approached. Once it was established that the patient was not 18 years of age, the encounter was discontinued. One patient from each of the following departments was excluded: Obstetrics Clinic, Primary Care Medicine Clinic, Emergency Department, and the Surgical Ward. The remaining 190 surveys were available for statistical analysis.

The majority [71.05% (135/190)] of the patients surveyed were women. This was not done intentionally; however, certain hospital services are provided specifically for women’s health. The Obstetrics Unit and Women’s Clinic would be expected to yield predominantly female samples. We also encountered a largely female sample when the survey was conducted at the Pediatrics Clinic, as female adults accompanied most of the children seen at this clinic.

The highest score attainable on the REALM test is 66. The highest score recorded was 66 (N = 32) and the lowest score was 9 (N = 1). As part of the survey patients were asked to give the last grade of school attended. In all, 127 of the patients surveyed had completed a high school education (including two patients who had general equivalency diplomas, or GEDs) or higher (college level and beyond). This figure represents 66.8% (127/190) of the completed surveys.

The average raw score on the REALM test was 59.2. This is equivalent to an average reading level of 7<sup>th</sup> to 8<sup>th</sup> grade abili-

ties. Davis et al., the creators of the REALM study, describe this population as those who “will struggle with most patient education materials; will not be offended by low literacy materials.”<sup>98</sup> Table 1 explains the grouping of the raw scores and their corresponding grade equivalent, and illustrates the frequencies recorded for each group.

Thirty-seven patient handouts were analyzed to determine their readability level. The Flesch method used to evaluate the literature generated a “Reading Ease” score that was matched to both a grade level equivalent and a description of style (See Table 2). The description of styles ranges from very easy to very difficult. There are a total of seven categories that were used to describe the patient handouts. Table 3 shows the breakdown of the numbers in each category.

**Table 1. Results of REALM assessments**

| Raw Score | Grade Equivalent                         | Total Number | Percentage of Total |
|-----------|--|--------------|---------------------|
| 61 – 66   | High School                              | 121          | 63.68%              |
| 45 – 60   | 7 <sup>th</sup> to 8 <sup>th</sup> Grade | 57           | 30.00%              |
| 19 – 44   | 4 <sup>th</sup> to 6 <sup>th</sup> Grade | 10           | 5.26%               |
| 00 – 18   | 3 <sup>rd</sup> Grade and Below          | 2            | 1.05%               |

**Table 2. Flesch Reading Ease score**

| Reading Ease | Grade       | Description of Style | Syllables per 100 Words | Average Sentence Length |
|--------------|-------------|----------------------|-------------------------|-------------------------|
| 90 - 100     | 5           | Very Easy            | 123                     | 8                       |
| 80 - 90      | 6           | Easy                 | 131                     | 11                      |
| 70 - 80      | 7           | Fairly Easy          | 139                     | 14                      |
| 60 - 70      | 8 - 9       | Standard             | 147                     | 17                      |
| 50 - 60      | 10 - 12     | Fairly Difficult     | 155                     | 21                      |
| 30 - 50      | College     | Difficult            | 167                     | 25                      |
| 0 - 30       | Coll. Grad. | Very Difficult       | 192                     | 29                      |

**Table 3. Flesch assessment of patient handouts**

| Description of Style | Grade Level      | Number of Handouts | Percent of Total |
|----------------------|------------------|--------------------|------------------|
| Very Difficult       | College Graduate | 0                  | 0.0%             |
| Difficult            | College          | 5                  | 13.5%            |
| Fairly Difficult     | 10-12            | 9                  | 24.3%            |
| Standard             | 8-9              | 13                 | 35.1%            |
| Fairly Easy          | 7                | 7                  | 18.9%            |
| Easy                 | 6                | 3                  | 8.1%             |
| Very Easy            | 5                | 0                  | 0.0%             |

The intentions of this study did not include directly testing the patient's reading abilities with perception and understanding of the written materials examined. One of the reasons for choosing the Flesch method was that this instrument did not require patient validation, meaning that the investigators could determine the approximate readability level without having to ask patients to read the material. Table 4 lists the handouts that were analyzed and the reading level that was subsequently assigned to them. None of the handouts fell into the categories of "very difficult" or "very easy." Five handouts were written at a reading level appropriate for people who have some college level education. These were "Actos" (manufacturer's patient information), "A Patient's Guide to Treatment of Thyroid Disease with Levothyroxine," "Baby Shots" (a parent's guide to childhood immunizations), "Fitness Injury Prevention," and "Sertraline Hydrochloride." Greater than fifty-nine percent of the material was written at levels that should be understandable with a ninth grade education or less.

### Discussion

The survey results seem to be similar to populations seen throughout the United States. Generally speaking, a medical practitioner cannot judge a patient's level of literacy based on the last grade of school completed. This appears to be true with the patient population at PIMC. The average grade completed in the group surveyed was 12.23 years. However, the average patient could only read at the 7<sup>th</sup> - 8<sup>th</sup> grade level. Practitioners should never assume a patient can read at levels equivalent to their years in school.

Due to the nature of this research project, there were several limitations to the usefulness of the study. The most obvious problem involves those patients who declined to participate. There is no possible method to determine whether patients were declining because they were unable to read. Since

**Table 4. Analysis of Handouts at the Phoenix Indian Medical Center**

| Handout Title  | Average Sentence Length | Average Word Length | Reading Ease Score | Grade Level         | Description      |
|--|-------------------------|---------------------|--------------------|---------------------|------------------|
| Actos  | 17.789                  | 172.485             | 42.857             | College             | Difficult        |
| All About Prevacid   | 15.091                  | 155.120             | 60.286             | 8-9 <sup>th</sup>   | Standard         |
| A Patient's Guide to Cyclosporine Therapy                                | 13.160                  | 155.015             | 62.335             | 8-9 <sup>th</sup>   | Standard         |
| A Patient's Guide to Ear Infections                                      | 15.400                  | 149.870             | 64.414             | 8-9 <sup>th</sup>   | Standard         |
| A Patient's Guide to Metered-Dose Inhalers                               | 13.815                  | 148.794             | 66.933             | 8-9 <sup>th</sup>   | Standard         |
| A Patient's Guide to the Treatment of Thyroid Disease with Levothyroxine | 10.724                  | 175.241             | 47.696             | College             | Difficult        |
| Baby Shots   | 10.871                  | 177.745             | 45.429             | College             | Difficult        |
| Be Stroke Smart  | 14.869                  | 159.064             | 57.175             | 10-12 <sup>th</sup> | Fairly Difficult |
| Breast Self-Examination  | 14.727                  | 137.654             | 75.432             | 7 <sup>th</sup>     | Fairly Easy      |
| Chicken Pox Vaccine  | 15.650                  | 160.703             | 54.995             | 10-12 <sup>th</sup> | Fairly Difficult |
| Diabetes Mellitus  | 13.885                  | 142.105             | 72.521             | 7 <sup>th</sup>     | Fairly Easy      |
| Diphtheria, Tetanus, and Pertussis Vaccines                              | 9.912                   | 173.294             | 50.341             | 10-12 <sup>th</sup> | Fairly Difficult |
| Domestic Violence Resource Booklet                                       | 8.189                   | 169.637             | 55.01              | 10-12 <sup>th</sup> | Fairly Difficult |
| Fitness Injury Prevention  | 18.500                  | 167.567             | 46.295             | College             | Difficult        |
| Hepatitis C  | 11.481                  | 160.323             | 59.549             | 10-12 <sup>th</sup> | Fairly Difficult |
| How To Start A Walking Program   | 11.065                  | 136.735             | 79.926             | 7 <sup>th</sup>     | Fairly Easy      |
| How To Take Birth Control Pills  | 16.095                  | 146.449             | 66.603             | 8-9 <sup>th</sup>   | Standard         |
| How To Use Eye Drops   | 11.95                   | 131.38              | 83.559             | 6 <sup>th</sup>     | Easy             |
| How To Use Eye Ointments and Gels  | 12.789                  | 125.926             | 87.321             | 6 <sup>th</sup>     | Easy             |
| Living With Rheumatoid Arthritis   | 10.424                  | 151.744             | 67.88              | 8-9 <sup>th</sup>   | Standard         |
| Making Choices About Contraception                                       | 12.333                  | 151.652             | 66.019             | 8-9 <sup>th</sup>   | Standard         |
| Neck Owner's Manual  | 18.389                  | 142.296             | 67.788             | 8-9 <sup>th</sup>   | Standard         |
| Nitroglycerin Sublingual Tablets   | 12.000                  | 157.143             | 61.712             | 8-9 <sup>th</sup>   | Standard         |
| Patient Information Handout Acne   | 12.045                  | 141.321             | 75.051             | 7 <sup>th</sup>     | Fairly Easy      |
| Peptic Ulcer Disease   | 14.176                  | 151.037             | 64.669             | 8-9 <sup>th</sup>   | Standard         |
| PIMC Emergency Department Discharge Instructions                         | 13.160                  | 167.781             | 51.535             | 10-12 <sup>th</sup> | Fairly Difficult |
| Prenatal Warning Signs and Instructions                                  | 9.935                   | 161.364             | 60.236             | 8-9 <sup>th</sup>   | Standard         |
| Scabies- Patient Information   | 14.130                  | 144.615             | 70.149             | 7 <sup>th</sup>     | Fairly Easy      |
| Sensible Shoes   | 16.095                  | 144.970             | 67.854             | 8-9 <sup>th</sup>   | Standard         |
| Sertraline Hydrochloride   | 15.190                  | 168.652             | 48.737             | College             | Difficult        |
| Tips For Success With Antibiotic Therapy                                 | 9.833                   | 160.169             | 61.352             | 8-9 <sup>th</sup>   | Standard         |
| Tuberculosis   | 12.308                  | 132.813             | 81.982             | 6 <sup>th</sup>     | Easy             |
| Understanding an Abnormal Pap Smear                                      | 15.409                  | 157.227             | 58.181             | 10-12 <sup>th</sup> | Fairly Difficult |
| Valley Fever "Cocci"   | 15.629                  | 131.280             | 79.909             | 7 <sup>th</sup>     | Fairly Easy      |
| VRE  | 10.409                  | 143.231             | 75.096             | 7 <sup>th</sup>     | Fairly Easy      |
| Your Child and Antibiotics   | 12.800                  | 158.750             | 59.540             | 10-12 <sup>th</sup> | Fairly Difficult |
| Your Treatment With Agenerase  | 13.750                  | 161.515             | 56.237             | 10-12 <sup>th</sup> | Fairly Difficult |

study participation was voluntary, it seemed unrealistic for the surveyor to follow-up with questions to determine the true reason for not wanting to be tested.

The REALM test is considered to be a valid instrument for estimating a patient's ability to read. However, a patient who is able to recognize and pronounce the words may not entirely understand written passages containing the same words. The REALM was designed to give a healthcare practitioner a quick and easy tool to determine if a patient may have problems understanding written materials. Another drawback to the REALM is that it has not been established as a valid indicator for patients whose primary language is not English. Twenty-eight of the patients asked to participate in this survey indicated that English was not the primary language spoken in their homes. Of these, 14 scored in the High School reading levels, 9 were in the 7 - 8<sup>th</sup> grade reading levels, 2 patients scored in the 4 - 6<sup>th</sup> grade level, and 3 were non-participants. This project did not intend to analyze differences between English speaking patients and those who do not use English as their primary language. Therefore, it would be outside the scope of this project to speculate whether or not these patient populations are truly different.

The Flesch method used for evaluating written patient information also has limitations. Written passages accompanied by illustrations cannot be scored differently with this method. Understanding of the written information may be greatly enhanced when it is accompanied by visual aids (especially ones that demonstrate techniques). There are several other factors

that can contribute to an item's "readability." Details such as the print size and the font used may influence how well a person is able to read the material.

Many patient information pamphlets do cover complicated topics. Sometimes using a difficult word is unavoidable. In these cases, it may be appropriate to phonetically spell out a word. For example, the pamphlet entitled "Baby Shots – A Healthy Dose of Love" provides information for parents following their child's immunization. By simply including the names of common vaccinations, the material scored in the "Fairly Difficult" category. Words like "diphtheria" or "haemophilus" were used to explain the different vaccines, and contributed to the Flesch score. It may help the patient understand these terms if a phonetic spelling appears with the words. If a patient sees "diphtheria," he or she may not visually recognize the term even though they would verbally understand it if it were used in conversation. It may increase patients' understanding if this word was followed by "(dip-thir-ee-a)."<sup>11</sup>

It is difficult for most health care professionals to imagine what life is like for a person with limited reading abilities. Many things that are taken for granted become barriers to understanding and completing everyday tasks. In terms of providing adequate health care, there is no systematic way to evaluate every patient's reading abilities. The REALM test is a valid instrument that is easy to use, and is accepted by most patients. A health care provider can use this test to quickly estimate a patient's reading abilities.

### Acknowledgments

We express our sincere thanks to Jane Johnson, PharmD candidate, surveyor, and Violet Geza, PharmD candidate, surveyor. Copies of the REALM may be obtained by contacting Dr. T. Davis, Department of Internal Medicine, LSUMC-S, P.O. Box 33932, Shreveport, Louisiana 71130-3932.

### References

1. Williams MV, Parker RM, Baker DW et al. Inadequate functional health literacy among patients at two public hospitals. *The Journal of the American Medical Association*. 1995; 274(21):1677-82.
2. Literacy Statistics. Phoenix, AZ: Literacy Volunteers of Maricopa County.
3. Williams MV, Baker DW, Parker RM, et al. Relationship of functional health literacy to patients' knowledge of their chronic disease. *Archives of Internal Medicine*. 1998; 158:166-71.
4. Davis TC, Mayeaux EJ, Fredrickson D, et al. Reading ability of parents compared with reading level of pediatric patient education materials. *Pediatrics*. 1994;93(3):460-8.
5. Foltz A, Sullivan J. Get real: Clinical testing of patient's reading abilities. *Cancer Nursing*. 1998;21(3):162-6.
6. Policy and Procedure Manual. Phoenix Indian Medical Center, 1993.
7. Davis T, Crouch M, Long S. Rapid estimate of adult literacy in medicine. *Family Medicine*. 1993;25(6):392-5.
8. Davis TC, Crouch MA, Long SW, et al. Rapid assessment of literacy levels of adult primary care patients. *Family Medicine*. 1991;23:433-5.
9. Spadareo DC, Robinson LA, Smith LT. Assessing readability of patient information materials. *American Journal of Hospital Pharmacy*. 1980;37:215-21.
10. Hogan L. Tips on writing patient information. *American Pharmacy*. 1980;NS20(11):32.



---

# The Kaiser Family Foundation Native American Health Policy Fellowship Program

---

*Yvette Roubideaux MD, MPH, Clinical Assistant Professor, University of Arizona College of Public Health, Tucson, Arizona; and Priya A. Helweg, Program Manager, Kaiser Family Foundation Native American Health Policy Fellowship Program, Washington, DC*

---

The Henry J. Kaiser Family Foundation (the Kaiser Foundation) has awarded fellowships for the past three years to outstanding American Indian and Alaska Native individuals who have made their career in health and welfare related fields and are interested in health policy. The Foundation has a strong commitment to American Indian and Alaska Native leadership development as a part of its overall activities as a non-profit, independent, national health care philanthropic organization dedicated to providing information and analysis on health issues to policymakers, the media, and the general public.

For several years, Kaiser has offered useful publications on issues related to Indian health policy, such as health insurance and access to care issues, Medicaid managed care, reauthorization of the Indian Health Care Improvement Act, and sources of financing and health spending for American Indians and Alaska Natives. Kaiser continues its commitment to American Indian and Alaska Native health by announcing the upcoming fourth year of the Native American Health Policy Fellowship Program. This article describes the fellowship program and contains application information. American Indians and Alaska Natives with at least three years of experience in Indian health are eligible to apply.

## Description

The purpose of the Henry J. Kaiser Native American Health Policy Fellowship Program is to give American Indians and Alaska Native health and welfare leaders an opportunity to learn more about national health and welfare policy issues that affect American Indian and Alaska Natives and gain a better understanding of the national policy-making process. Fellows work full-time for one year in Washington, DC, in a Congressional or Executive Branch office to gain first-hand knowledge of policy issues and how government works. Past fellows have worked with the Minority and Majority staff on the Senate Indian Affairs Committee, the House Commerce Committee, the White House Office on the President's Initiative for One America, the Democratic Policy Committee, Department of Health and Human Services, and in a Senator's office. In addition, fellows

participate in seminars on health and welfare policy issues and have the opportunity to meet with top administrators of agencies responsible for health and welfare programs, elected representatives, Congressional staff, and experts from policy research groups. The fellows also develop their research and analytic skills by writing a short policy paper on a topic related to American Indian and Alaska Native health care or welfare policy.

Eligibility requirements for this fellowship program include the following:

- Membership in an American Indian or Alaska Native tribe.
- At least three years of work experience in an Indian health program (Indian Health Service, tribal, or urban program; I/T/U) or other relevant setting (college, university, non-governmental, or public sector organizations can qualify).

A strong candidate would have a commitment to pursue a career in American Indian and Alaska Native health and welfare issues, with demonstrated leadership potential in their prior work and applications. Past fellows have included: Melissa McNeil, Executive Officer, Office of the Principal Chief for the Cherokee Nation; Beverly Russell, Women's Wellness/Special Projects Coordinator for The American Indian Community House, Inc; and Roberta Kinzhuma, Program Director, Oneida Nation Elderly Services. The current fellows are:

- Josie Atcitty (Navajo), Management Analyst for the Northern Navajo Medical Center, Shiprock, New Mexico. During her fellowship year she is working on Indian affairs for United States Senator Pete V. Domenici of New Mexico.
- Stacey L. Ecoffey, MSW (Oglala Sioux), Health and Human Services Committee Coordinator for the Oglala Sioux Tribe, Pine Ridge, South Dakota. During her fellowship she is working with the Senior Advisor for Tribal Affairs, Intergovernmental Affairs, Office of the Secretary at the Department of Health and Human Services.
- Barbara Finkbonner (Lummi), Director, Lummi Tribal Health Center, Bellingham, Washington. During her fellowship she is working with the minority staff on the House Commerce Committee.

The fellowship provides an annual stipend of \$40,000, a housing stipend, and certain travel expenses. The fellowship

---

program runs from January to December. Fellows must make a commitment to work the entire year in Washington, DC, and usually take a leave of absence from their current job. Stipends are paid through the fellow's current employer or another sponsoring organization during the fellowship.

### Application Process

Applications for the 2002 Native American Health Policy Fellowship Program are available and are due August 15, 2001. Applications requests should be directed to:

Priya Helweg, Program Manager  
Native American Health Policy Fellowship Program  
The Henry J. Kaiser Family Foundation  
1450 G Street, NW, Suite 250  
Washington, DC 20005  
Tel: (202) 347-5270  
Fax: (202) 347-5274  
E-mail: [phelweg@kff.org](mailto:phelweg@kff.org)

Complete application forms are also available on the Kaiser Family Foundation website at [www.kff.org](http://www.kff.org).

Completed applications will include an application form, an "agreement to sponsor" form for the employer or sponsoring organization, two professional reference forms, a resumé, and a writing sample. Applications are reviewed by a national selection committee that includes several experts in Indian health policy. Up to eight applicants will be interviewed in Washington, DC, in October, and up to four fellows will be selected by November, 2001.

The Henry J. Kaiser Native American Health Policy Fellowship provides an outstanding opportunity for American Indians and Alaska Natives working in Indian health programs to learn more about how health policy is made and how Indian health policy issues are dealt with in Washington, DC. At a time when the Indian health system is changing rapidly, when tribes are assuming management of their own health programs, and when significant under-funding exists, it is critical for more American Indians and Alaska Natives to understand how Federal health policy is developed and how it affects Indian communities. The individuals who complete this fellowship have the potential to be leaders in the future of Indian health policy and to positively impact the future health of American Indian and Alaska Native people.

---

## Film About American Indian Veterans' Views About Health Care Available

In summer 2000, a film about American Indian Veterans and their views of health care delivery evolved in Tucson, Arizona. The film, entitled "Respect: A Vision to Better Serve Our American Indian Veterans," profiles nine American Indian Veterans who are primarily from the Western United States. Each Veteran is offered the opportunity to comment on common themes such as cultural taboos, financial hardships faced by those living on reservations, and stereotyping of American Indian patients.

One of the producers of the film is a registered nurse who has spent ten years working exclusively with American Indian Veterans and their families at the Southern Arizona VA Health Care System in Tucson. She is a member of the Veterans Health Administration's EEO American Indian Advisory Council, which provided funding for this film.

The film, which is approximately 30 minutes in length, is available to anyone who would like to become an advocate for American Indian people. Whether you are an administrator or a health care provider who works with American Indian patients

within the Veterans Affairs system or in the Indian Health Service, you may find this film useful as an educational tool in caring for your patients.

To receive your copy at no cost, please send your address to:

Yvonne Garcia, RN  
Southern Arizona VA Health Care System  
3601 S. Sixth Ave.  
Tucson, Arizona 85723



---

# Notes from the Elder Care Initiative

---

*Bruce Finke, MD, Coordinator, IHS Elder Care Initiative, Zuni, New Mexico*

---

## Subscribe to the Eldercare Listserv

The number of individuals who have expressed an interest in keeping in touch on elder issues continues to grow. We have set up an e-mail listserv so that we can share information, resources, and ideas. The listserv is by far the least expensive and fastest way to keep in touch and we will generally be using it rather than sending out mailings. If you don't have access to e-mail, please mail or fax me a note that you want to stay on the reduced mailing list so that I can keep you "in the loop."

To subscribe to the listserv send e-mail to [listserv@hqt.ihs.gov](mailto:listserv@hqt.ihs.gov) with the following message in **plain** text in the **body (not the subject line!)** of the e-mail:

**subscribe eldercare yourfirstname  
yourlastname**

After you've subscribed, you can communicate with other participants in the listserv group. Address your e-mail to [eldercare@hqt.ihs.gov](mailto:eldercare@hqt.ihs.gov).

## PCC Comprehensive Elder Exam

As most of you know by now, the PCC (Patient Care Component) Comprehensive Elder Exam form is finally available as form IHS-865. This PCC walks the provider through a state-of-the-art annual geriatric assessment and can be used to collect data on the functional status of the older patient. The functional status information can be printed on the Health Summary and can be used to generate reports for your clinic or community. For details about how to order and use this new PCC form, look at the Elder Care Initiative website at [www.ihs.gov/medicalprograms/eldercare](http://www.ihs.gov/medicalprograms/eldercare) and click on "What's New."

## Guide to Comprehensive Geriatric Assessment in Indian Country

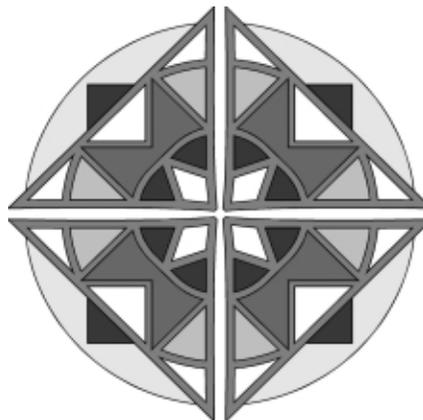
In collaboration with the New Mexico Geriatric Education Center, we have developed the "Guide to Comprehensive Geriatric Assessment in Indian Country." This handbook addresses geriatric assessment as it really happens in the Indian health care system and describes tools and approaches currently in use at various sites. We hope that it will be a great help to those developing geriatric clinics and assessment programs for their communities. Contact Dr. Bruce Finke (by e-mail,

mail, or fax) to obtain a copy (one copy per site please). We will need to do another printing, so these Guides will be mailed out in August.

## AoA Native American Caregiver Support Program

All Title VI (Senior Center and Meals on Wheels) programs will have received a letter describing the new Administration on Aging Native American Caregiver Support Program. As the letter states, "The purpose of this program is to help families caring for an older relative with a chronic illness or disability. The program will assist Tribes in providing multi-faceted systems of support services for family caregivers and for grandparents or older individuals who are relative caregivers."

Congress has appropriated \$5 million for this program for FY 2001. Eligible applicants to apply for both the formula and demonstration grants are current Title VI, Parts A and B grantees. There may be an opportunity for collaboration between clinics and hospitals and Senior Centers in developing these grant proposals. For more information, go to <http://www.aoa.dhhs.gov/t4/fy2001/nacsp-letter.html>.



---

## RWJ Foundation Announces Community Partnerships for Older Adults Grants

Community Partnerships for Older Adults is a new, \$28-million initiative of the Robert Wood Johnson Foundation. This national program is designed to promote local efforts to improve the systems delivering long term care and supportive services to vulnerable older adults and their caregivers.

Over the next eight years, working groups in communities across the nation will receive grant funding to develop and implement strategies to:

- Mobilize and strengthen community resources to meet the growing need for long term care and supportive services.
- Increase communication and coordination among providers, and between providers and consumers.
- Promote a better quality of life for vulnerable older adults and their caregivers.

Find the Call for Proposals describing the program and information about how to apply at <http://www.muskie.usm.maine.edu/communitypartnerships/>

Please sign up on the listserv, stay in touch, and let me know how the Elder Care Initiative can help you provide quality care for the elders we serve.

Bruce Finke, MD  
IHS Elder Care Initiative  
Box 467  
Zuni, New Mexico 87327  
E-mail: [bfinke@abq.ihs.gov](mailto:bfinke@abq.ihs.gov)  
Phone: (505) 782-7357  
Fax: (505) 782-7405  
Website: [www.ihs.gov/eldercare](http://www.ihs.gov/eldercare)

---

## POSITION VACANCIES

*Editor's note: As a service to our readers, THE IHS PROVIDER will publish notices of clinical positions available. Indian health program employers should send brief announcements on an organizational letterhead to: Editor, THE IHS PROVIDER, The IHS Clinical Support Center, Two Renaissance Square, Suite 780, 40 North Central Avenue, Phoenix, Arizona 85004. Submissions will be run for two months, but may be renewed as many times as necessary. Tribal organizations that have taken their tribal "shares" of the CSC budget will need to reimburse CSC for the expense of this service. The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.*



### Physician Assistant, Nurse Practitioner, or Physician Yukon Kuskokwim Health Corporation; Bethel, Alaska

The Yukon Kuskokwim Health Corporation is looking for a full time physician assistant, nurse practitioner, or physician eligible for licensure in the state of Alaska to join our Village Operations Team as Director of Education. Responsibilities include the operations of Health Aide training, including basic training, advanced training, and EMS training, and ensuring its coordination with other components of the Health Aide Program. Located in the culturally rich Yukon-Kuskokwim Delta of Southeast Alaska, we support a staff of 190 Community Health Aides. Two years of clinical experience and two years in an educational setting are required. Experience with Health Aide training and distance education desirable. Grant writing, public relations, effective communication (oral and written), working knowledge of computers (Macintosh and Microsoft Office suite), and experience as an EMT or paramedic preferred. If interested, please submit a resume and cover letter to Yukon Kuskokwim Health Corporation, Attention: Dana L. Hall, Box 528, Bethel, AK 99559-0528; telephone (907) 543-6131; fax (907) 543-6143; e-mail [dana\\_hall@ykhc.org](mailto:dana_hall@ykhc.org).

### Physician Assistant, Nurse Practitioner, or Physician Yukon Kuskokwim Health Corporation; Bethel, Alaska

The Yukon Kuskokwim Health Corporation is looking for a full time registered nurse, nurse practitioner, or physician assistant eligible for licensure in the State of Alaska to join our Village Operations Team as Advanced Training Coordinator. Responsibilities include coordinating the activities of the Advanced Training Program and the delivery of the Well Child (EPSDT) Program as done by Advanced Trained Community Health Aides/

---

Practitioners in Village Clinics. Located in the culturally rich Yukon-Kuskokwim Delta of Southeast Alaska, we support a staff of 190 Community Health Aides and 48 clinics. Two years of health care experience, one-year supervisory experience, and a positive work history is required. Grant writing, budget management, public relations, effective communication (oral and written), and working knowledge of computers (RPMS and Microsoft Office suite) preferred. Ability to perform special skills (e.g., immunizations, pap smears, well child screening, etc.) is preferred. Willingness to travel to village clinics a must. If interested, please submit a resume and cover letter to Yukon Kuskokwim Health Corporation, Attention: Dana L. Hall, Box 528, Bethel, AK 99559-0528; telephone (907) 543-6131; fax (907) 543-6143; e-mail [dana\\_hall@ykhc.org](mailto:dana_hall@ykhc.org)

### **Registered Nurse Yukon Kuskokwim Health Corporation; Bethel, Alaska**

The Yukon Kuskokwim Health Corporation is looking for a full time registered nurse eligible for licensure in the State of Alaska to join our Community Health and Wellness team as Diabetes Education RN. Responsibilities include planning, organizing, and coordinating diabetes related health promotion activities, maintaining the diabetes registry, providing care management, and building sustainable systems through Health Aide training and community mini-grants. Located in the culturally rich Yukon-Kuskokwim Delta of Southeast Alaska, we support a staff of 190 Community Health Aides and 48 clinics. Completion of a program of education in nursing from an accredited school of nursing, two years of health care experience in a cross-cultural setting, data management skills, and strong oral/written communication skills required. Certified Diabetes Educator (CDE), case management skills, diabetes registry experience, and data base management skills preferred. Willingness to travel to village in small planes a must. If interested please submit a resume and cover letter to Yukon Kuskokwim Health Corpora-

tion, Attention: Amber Norgaard, Box 528, Bethel, AK 99559-0528; telephone (907) 543-6131; fax (907) 543-6143; e-mail [amber\\_norgaard@ykhc.org](mailto:amber_norgaard@ykhc.org).

### **Physician Southern Indian Health Council; Alpine, California**

Seeking board certified family practice physician with interests in pediatrics, women's health, and addiction medicine to provide primary care at an outpatient rural clinic in east San Diego county serving American Indians and the general public. Medical directorship responsibility at a nearby youth residential treatment facility. Excellent benefits. Shared call coverage. No hospital work. Loan repayment possibilities. Send CV to Robert Sablove, MD, Medical Director, Southern Indian Health Council, P.O. Box 2128, Alpine, California 91903-2128; fax (619)445-0579; e-mail [rsablove@sihc.org](mailto:rsablove@sihc.org).

### **Certified Registered Nurse Anesthetist or Anesthesiologist Claremore, Oklahoma**

The Claremore PHS Indian Hospital is seeking a certified registered nurse anesthetist or an anesthesiologist. This is a full-time position in a three member department covering two operating rooms. Night call is taken from your home and does not involve trauma or a labor epidural service. Anesthetics are provided for a wide range of both inpatient and outpatient services including general surgery, OB/gyn, dentistry, and podiatry.

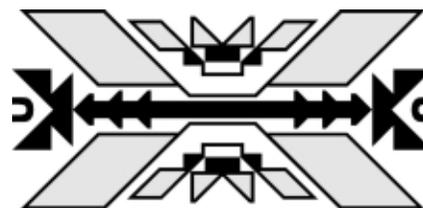
Claremore is a rapidly growing community near a major metropolitan area (Tulsa) with convenient access to scenic recreational and cultural opportunities. A warm climate and a relaxed practice with congenial staff make this an attractive salaried position.

Send CV to Paul Mobley, DO, Clinical Director, Claremore PHS Indian Hospital, 101 South Moore, Claremore, Oklahoma 74017-509; telephone (918) 342-6433; fax (918) 342-6517.

---

## Correction

In the March issue of THE PROVIDER, there was a brief item entitled "University of Minnesota School of Nursing Announces Internet-based Masters Degree Program" (THE IHS PROVIDER, Volume 26, Number 3, March 2001, page 39). Since the publication of this piece, a more specific e-mail address has been established to contact the program. For more information please visit [www.nursing.umn.edu/telign.html](http://www.nursing.umn.edu/telign.html) or contact Trina Lone Hill at (888) 240-8636; e-mail [loneh001@umn.edu](mailto:loneh001@umn.edu).





## Change of Address or Request for New Subscription Form

Name \_\_\_\_\_ Job Title \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Worksite:  IHS  Tribal  Urban Indian  Other

Service Unit (if applicable) \_\_\_\_\_ Social Security Number \_\_\_\_\_

Check One:  New Subscription  Change of address

If change of address, please include old address, below, or attach address label.

Old Address \_\_\_\_\_

### THE IHS PRIMARY CARE PROVIDER



THE PROVIDER is published monthly by the Indian Health Service Clinical Support Center (CSC). Telephone: (602) 364-7777; Fax: (602) 364-7788; e-mail: [the.provider@phx.ih.s.gov](mailto:the.provider@phx.ih.s.gov). Previous issues of THE PROVIDER (beginning with the February 1994 issue) can be found at the CSC home page, [www.csc.ih.s.gov](http://www.csc.ih.s.gov).

- Wesley J. Picciotti, MPA ..... *Director, CSC*
- John F. Saari, MD ..... *Editor*
- E.Y. Hooper, MD, MPH ..... *Contributing Editors*
- Cheryl Begay ..... *Production Assistant*
- Elaine Alexander, RN ..... *Exec. Leadership Dev. Prog. Coordinator*
- Theodora R. Bradley, RN, MPH ..... *Nursing Consultant*
- Erma J. Casuse, CDA ..... *Dental Assisting Training Coord.*
- Mary Beth Kinney, MPH, EdD ..... *Dental Ed. Spec.*
- Edward J. Stein, Pharm D ..... *Pharmacy Consultant*

**Opinions expressed in articles are those of the authors and do not necessarily reflect those of the Indian Health Service or the Editors.**

**Circulation:** THE PROVIDER (ISSN 1063-4398) is distributed to more than 6000 health care providers working for the IHS and tribal health programs, to medical and nursing schools throughout the country, and to health professionals working with or interested in American Indian and Alaska Native health care. If you would like to receive a copy, send your name, address, professional title, and place of employment to the address listed below.

**Publication of articles:** Manuscripts, comments, and letters to the editor are welcome. Items submitted for publication should be no longer than 3000 words in length, typed, double spaced, and conform to manuscript standards. PC-compatible word processor files are preferred. Manuscripts may be received via e-mail.

Authors should submit at least one hard copy with each electronic copy. References should be included. All manuscripts are subject to editorial and peer review. Responsibility for obtaining permission from appropriate tribal authorities and Area Publications Committees to publish manuscripts rests with the author. For those who would like more information, a packet entitled "Information for Authors" is available by contacting the CSC at the address below or on our website at [www.csc.ih.s.gov](http://www.csc.ih.s.gov)

Dept. of Health and Human Services  
Indian Health Service  
Clinical Support Center  
Two Renaissance Square, Suite 780  
40 North Central Avenue  
Phoenix, Arizona 85004

**PRESORTED STANDARD**  
POSTAGE AND FEES PAID  
U.S. DEPT. OF HEALTH & HUMAN  
SERVICES  
**PERMIT NO. G-290**

CHANGE SERVICE REQUESTED

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300