



DEPARTMENT OF HEALTH & HUMAN SERVICES

Indian Health Service
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To: Area Director
Chief Medical Officer
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From: Chief of Chronic Disease
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Subject: AI/AN Pediatric Height-Weight Surveillance System

This letter contains important information regarding the American Indian and Alaska Native (AI/AN) Pediatric Height-Weight Surveillance System, a new public health surveillance activity that will help address the problem of obesity among American Indian and Alaska Native children. This letter describes the new activity and its primary data source: height and weight data collected through the Clinical Reporting System (CRS). Because this information is being collected at the site level, we want you to be fully informed about the parameters of this activity, and to understand how this information will be used.

As you know, the prevalence of obesity in American Indian and Alaska Native (AI/AN) populations has increased dramatically over the past 30 years. Among American Indian preschool and school-age children, obesity rates are up to three times higher than those of other US populations. An estimated 40 percent of AI children are overweight. Obesity is a risk factor for diabetes, which now affects over one quarter of the adult AI population, as well as cardiovascular disease, and some cancers. IHS is committed to reducing childhood obesity through SDPI-funded projects, nutrition education and other community and clinical interventions, and partnerships with Tribes.

Obesity is very difficult to treat. Comprehensive obesity prevention programs beginning early in childhood are necessary if the epidemics of obesity and diabetes among AI/AN populations are to be reversed. Evidence-based school and community interventions that are culturally oriented and family centered are needed to encourage lifelong healthy eating and regular physical activity. However, we do not have a consistent source of accurate data on obesity rates among AI/AN populations, and consequently we cannot track or evaluate efforts to prevent and treat obesity in AI/AN communities. In 2001, IHS reported to Congress on the problem of obesity within the AI/AN community, along with suggestions on how to address the problem. We were greatly

hampered in writing this report by the lack of current data. One major recommendation of this report was to “Support clinical behavioral research and evaluation of public health approaches conducted in partnership with tribes by NIH, CDC, and IHS to prevent and treat obesity in AI/AN populations.”* We anticipate being asked to do a follow-up report, and will need better baseline and trend information.

Even prior to this report, IHS began tracking Body Mass Index (BMI) measurement for GPRA reporting in FY 2000. From 2000-2005 this GPRA measure tracked the proportion of active users, ages 2-74, who had height and weight measured and BMI calculated. As of FY 2006, this GPRA measure has begun to focus specifically on reducing obesity among 2-5 year old children, by tracking the rate of children with a BMI above the 95th percentile. While summarized Area reports can provide a useful overview, GPRA data is not detailed enough for purposes of this surveillance activity. For example, the more complete data file would allow tracking of BMI by one-year groups, or comparing trends among children at age 2 with those in the 2-5 year old age group. Different clinical approaches may be required depending upon which of these groups is experiencing an increase in BMI. It will also be possible to calculate other measures such as weight-for-height, which are not programmed into the GPRA report.

The American Indian and Alaska Native (AI/AN) Pediatric Height-Weight Surveillance System is part of the effort to combat childhood obesity. The purpose of this activity is to collect information on the current height and weight status of AI/AN children and use the information to:

- establish a national baseline prevalence of childhood overweight and underweight by defined geographic regions;
- increase awareness of the high prevalence of childhood overweight;
- track changes over time, using consistent measures;
- target resources for healthy growth and development for prevention of diabetes and other chronic diseases; and
- justify additional resources for early intervention in local, regional, and national IHS/Tribal/Urban Indian health programs and communities to decrease the health disparities in AI/AN.

The IHS Division of Epidemiology has worked with the CRS technology staff to develop a method for obtaining the data necessary from reporting GPRA sites. For CRS Version 6.0 (the current released version of the software), when a facility runs the National GPRA report and exports its data to its Area Office, a file is created for children ages 0-18 from 1999-2006, containing the following data elements:

1. Site Name
2. ASUFAC

* Indian Health Service. *IHS Report to Congress: Obesity Prevention and Control for American Indians and Alaska Natives*. April 2001

3. Unique Registration ID (from Registration)
4. Date of Birth in MM/DD/CCYY format (from Registration)
5. Ethnicity (from Registration)
6. Gender (from Registration)
7. State of Residence (from Registration)
8. Unique Visit ID (Visit file)
9. Visit/Admit Date&Time (Visit file)
10. Height (converted from inches to centimeters)
11. Weight (converted from pounds to kilograms)

Note both a height and weight must be recorded for each visit. If only a height or a weight was recorded, it will not be sent in this file.

This file is created automatically, although it does not display during the run. The data for this file is included in the National GPRA file (i.e. files beginning with "BG06") that goes to the Area for aggregation. The Area Office may then run an option to combine all of the facilities' height and weight data into a single data file to be sent to Elaine Brinn at the CAO. The files will then be collected and forwarded to Drs. Marty Kileen and Nat Cobb at the Division of Epidemiology. No unduplication of data occurs during the aggregation process, and the files are not sent automatically to Epidemiology. A site may obtain a data file relating to its population from the Area coordinator.

In CRS Version 6.1, to be released in late June 2006, two changes are going to occur:

1. The content of this file is going to be expanded to include height and weight data for ALL Active Clinical patients, regardless of age. For children ages 0-18, both a height and weight must be recorded on a visit; for all other ages, either a height and/or a weight must be recorded on each visit. The purpose of this change is to allow us to do analyses and trending for adults similar to those described for children.
2. Functionality is going to be added to prompt the user when s/he chooses to export the National GPRA report data to the Area Office if s/he would like to create the Height and Weight file locally on their server as a delimited text file. If the user chooses to create the file, it may be opened in an application such as SAS, MS Access or MS Excel. Note that Excel imposes a maximum of 65,535 records per file and if the file contains more than that number of records, the file will be truncated and there will be no way to retrieve the remaining records. Thus, it is recommended that SAS or Access be used to open these files. It is also strongly cautioned that, unless this data is going to be actively used and reviewed, this file should not be created each time the National GPRA report data is exported to the Area Office because the file can be very large, depending on the number of patients in the facility's database.

In order for this data to be complete, statistically meaningful, and comparable to other data sources, it needs to be collected at a local level. Additionally, the site-specific data

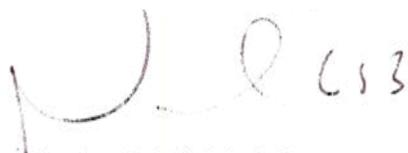
will allow an individual Service Unit or Tribal program to develop interventions or approaches to weight control that take into account specific factors unique to a population. Local-level data also allows us to compare with data from other sources, for internal validation purposes. For example, height and weight data has been collected at several sites for children in schools and Head Start facilities by the Tribal Epicenters. By comparing this data with that collected through CRS, we can find out how well the BMIs currently measured in our clinics represent the BMIs of the entire population of children. It is possible, for instance, that heavier children are more likely to be weighed and measured in our clinics, skewing our statistics.

There are three points we want to emphasize about this surveillance system and the data file. **First, this file does not collect any site-specific performance-related data.** It is a file designed to capture height and weight data for the purposes of statistical data collection only. **No** performance-related measure information is captured and no GPRA measure information is collected, including the proportion of patients who have a BMI calculated at a specific site.

Second, **no site-specific statistical data will be published.** Our intent is to use this statistical data to create age-specific trend data (summarized at the area or state level) to help guide decision making about the childhood weight GPRA measure and associated interventions. We will also use this data to compare with population-based estimates generated from other data collection. Weight and height data will be collected in future years as well.

Third, as is true of any of our patient information, **collection and storage of data will be governed by applicable HIPAA regulations**, and any proposal or request to perform research using this database will be subject to the standard process of IRB review and approval.

We hope that you will appreciate the value of such information, both to the overall effort to combat obesity, and as a potential resource for your site. However, if you have objections to including data from your site in this surveillance system, or would like further information, please contact your Area GPRA coordinator.



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