RESOURCE AND PATIENT MANAGEMENT SYSTEM

GPRA+
Clinical Indicator Reporting System
(BGP)

Installation Guide and Release Notes

Version 3.1
July 2004

Information Technology Support Center
Division of Information Resources
Albuquerque, New Mexico

PREFACE

This manual contains the installation guide for the GPRA+ Clinical Indicator Reporting System version 3.1, which adds FY 2004 clinical performance indicators to existing FY 2002 and FY 2003 indicators.

The GPRA+ Clinical Indicator Reporting System is an RPMS (Resource and Patient Management System) software application designed for national reporting as well as local and Area monitoring of clinical GPRA and developmental indicators. GPRA+ was first released for FY 2002 indicators and is based on a design by the Aberdeen Area (GPRA2000).

The Government Performance and Results Act (GPRA) requires Federal agencies to report annually on how the agency measured up against the performance targets set in its annual Plan. IHS GPRA indicators include measures for clinical prevention and treatment, quality of care, infrastructure, and administrative efficiency functions. The GPRA+ Reporting System is the reporting tool used by the IHS Office of Planning and Evaluation to collect and report clinical performance results annually to the Department of Health and Human Services (DHHS) and to Congress.

Each year, an updated version of GPRA+ software is released to reflect changes in the logic descriptions of the different denominators and numerators. Additional indicators may also be added. Local facilities can run reports as often as they want to and can also use GPRA+ to transmit data to their Area. The Area Office can use GPRA+ to produce an aggregated Area report for either annual GPRA or Area Director Performance reports.

The GPRA+ Reporting System will produce reports on demand from local RPMS databases for both GPRA and developmental clinical indicator measures that are based on RPMS data. GPRA+ is intended to eliminate the need for manual chart audits for evaluating and reporting clinical indicators. Administrative and clinical users will be able to review individual or all indicators at any time, and can:

- identify potential data issues in their RPMS, i.e., missing or incorrect data;
- monitor their site's performance against past national performance and upcoming agency goals;
- identify specific areas where the facility is not meeting the indicator in order to initiate business process or other changes;
- quickly measure impact of process changes on indicators;
- identify areas meeting or exceeding indicators to provide lessons learned.

To produce reports with comparable data across every facility, the GPRA indicator definition was "translated" into programming code with the assistance of clinical subject matter experts. GPRA+ uses pre-defined taxonomies to find data items in PCC to determine if a patient meets the indicator criteria. Taxonomies contain groups of codes (e.g., diagnoses or procedures) or site-specific terms. Each indicator has one or more denominators and numerators defined.

GPRA+ is intended for use by Area and site Quality Improvement staff, Compliance Officers, GPRA Coordinators, clinical staff such as physicians, nurses, nurse practitioners, and other providers, Area Directors, as well as any staff involved with quality assurance initiatives.

TABLE OF CONTENTS

1.0   Release Notes

The GPRA+ Clinical Indicator Reporting System is an RPMS (Resource and Patient Management System) software application designed for local and Area monitoring of clinical performance indicators in a timely manner.

Because definitions of clinical indicators can change every year, GPRA+ will be updated and released annually. The current version BGP 3.1 adds FY 2004 clinical performance indicators to existing FY 2002 and FY 2003 indicators.

1.1   Clinical Performance Assessment and GPRA

Performance assessment measures what an organization does and how well it does it. For a healthcare organization, such as the Indian Health Service, this means measuring how well we deliver healthcare services to our population, measured by documentable improvement in various standard health indicators. Standardized clinical performance measures provide a systematic approach to health improvement for our organization. Results from performance assessment are used internally within the IHS, at national and local levels, to support and guide performance improvement in those clinical areas that need it. Performance results are also needed externally to demonstrate accountability to an organization's stakeholders; for IHS, this means Congress and the current Administration. Since clinical care is provided in the field, understanding and reporting on clinical performance measures can no longer be solely the concern of IHS Headquarters staff.

1.1.1   What Is GPRA?

Since 1955, the IHS has demonstrated the ability to utilize limited resources to improve the health status of the American Indian and Alaska Native people by focusing on preventive and primary care services. The IHS, like all Federal agencies, is under increasing pressure to demonstrate progress in a measurable way towards its mission and goals.   The current Administration is actively promoting agency accountability and is tying agency budgets to performance as one of five key initiatives within the President's Management Agenda (PMA).

The Government Performance and Results Act (GPRA) requires Federal agencies to demonstrate that they are using their funds effectively toward meeting their missions. The law requires agencies to have both a 5-year Strategic Plan in place and to submit Annual Performance Plans describing specifically what the agency intends to accomplish toward those goals with their annual budget. Every year, the agency reports on how the agency measured up against the performance targets set in the Plan.

Appropriately for a healthcare organization, most IHS GPRA indicators describe clinical treatment and prevention measures. The performance indicators address the most significant health problems facing the American Indian and Alaska Native (AI/AN) population as identified by representatives of the local I/T/U programs as

well as management areas of the President's Management Agenda. For FY 2004, the IHS has 40 GPRA indicators in four main categories: Treatment (21), Prevention (12), Capital Programming/Infrastructure (2) and Partnerships/Core Functions/ Advocacy (5).

Indicators are further characterized by type.

Process Indicators	Activities and health services that contribute to reducing mortality and morbidity
	Examples – construction of clinics, identification of prevalence of disease, patient satisfaction surveys
Impact Indicators	Scientific evidenced-based link to improved health outcomes by reducing risk factor of mortality or morbidity
	Examples – immunizations, dental sealants, safe drinking water, cancer screenings
Outcome Indicators	Directly relate to reducing mortality or morbidity relative to a disease or condition that program(s) addresses
	Examples – reducing prevalence of obesity, diabetic complications, unintentional injury

All GPRA indicators are determined annually by the GPRA Coordinating committee, with input from specific subject matter experts in various subject areas. Teleconferences and meetings are held regularly to review, discuss and edit or add indicators. The Office of Management and Budget (OMB) has requested that IHS reduce process indicators and increase outcome indicators. Potential (developmental) indicators for emerging areas of clinical concern to IHS, such as HIV or cardiovascular disease prevention, are proposed, discussed and refined over several months and may change definition several times before being included as a formal GPRA indicator. One of the criteria for adding new indicators is that they are measurable; for clinical indicators, this means that performance data can be gathered by using RPMS data.

See GPRA+ User Manual Appendix A: *FY04 and FY05 GPRA Indicators* for a complete list of FY 2004 GPRA indicators. Further information about GPRA performance reporting, including results for FY 2001 through FY 2003 can be found at the following web site:
http://www.ihs.gov/NonMedicalPrograms/PlanningEvaluation/pe-gpra.asp.

1.1.2   Clinical Performance Indicators

Most of the 40 IHS GPRA indicators are clinical. Each GPRA performance indicator has a denominator and a numerator defined. The denominator is the total population being reviewed; the numerator is the number of patients from the denominator who meet the definition of the indicator.

The Treatment indicator category includes indicators covering: diabetes, cancer, behavioral health, oral health, accreditation, and medications. An example of a treatment indicator is Diabetes: Blood Pressure Control – during FY 2004, increase the proportion of patients with diagnosed diabetes that have achieved blood pressure control by 1% over FY 2003 level (defined as the mean of at least 2 non-ER blood pressure values less than 130/80). The IHS FY 2003 national rate was over 37%; the Healthy People 2010 goal is 40% (see section 3.1.3 Comparing Ourselves to National Guidelines).

The Prevention category includes indicators covering: public health nursing, immunization, injury prevention, behavioral health, cardiovascular disease, obesity, tobacco use, and HIV. An example of a prevention indicator is Adult Immunizations: Influenza – in FY 2004, maintain FY 2003 influenza vaccination rates among non-institutionalized adult patients aged 65 years and older. The IHS FY 2003 rate was 51%; the Healthy People 2010 goal is 90%.

Indicator example: GPRA Indicator Women's Health: Pap Smear Rates: During FY 2004, maintain the proportion of eligible women patients who have had a pap screen within the previous three years at the FY 2003 levels.

The denominator is the total population that is being reviewed for a specific indicator. For the Pap Smear indicator, the denominator is all female patients ages 18 through 64 at the beginning of the Report period. The numerator is the number of patients in the denominator who meet specific criteria. For Pap Smear, the numerator is the number of patients in the denominator who had either a pap smear, defined by certain codes, or a refusal of a pap smear documented in RPMS any time in the three years prior to the end of the report period. (See section 3.2.3 Indicator Logic Example for detailed description of indicator logic.)

In addition to the formal denominator and numerator for a GPRA indicator, there may be other denominators and numerators clinically related to the topic. For the Treatment indicator cited above, Diabetes: Blood Pressure Control, three separate denominators (patient populations) are examined. The GPRA denominator is Active Diabetic patients. The other two denominators that are reviewed for any Diabetes indicator are User Population and Active Adult Diabetic patients. (See section **Error! Reference source not found.** for detailed logic definitions of the denominators.) In addition to the GPRA numerator, patients with controlled BP, two related numerators are tracked: 1) patients with documented blood pressure in past year (mean of either two or three non-ER visit blood pressure values); and 2) patients with blood pressure that is not controlled. Reviewing all the denominators and numerators for the Diabetes Blood Pressure Control indicator topic gives a site's clinical staff a more comprehensive picture of the status of blood pressure control among diabetic patients.

Because the number of formal GPRA indicators for the Indian Health Service is limited by direction from the Office of Management and Budget (OMB), not all healthcare issues relevant to the American Indian and Alaska Native patient

population are defined. Developmental indicators that address emerging healthcare issues within the IHS have been defined for the agency. Some of these developmental indicators will become formal GPRA indicators in future years. For FY04, developmental indicators have been defined for colorectal cancer screening, prenatal HIV testing, mental health assessment for diabetic and cardiovascular (CVD) patients, CVD prevention and treatment, asthma, chlamydia screening, childhood obesity reduction, and medical nutrition education.

Required performance reporting provides the agency with a rationale and timeline to establish and maintain an ongoing process to identify, measure, and evaluate indicator results. By establishing a feedback loop of results evaluation and indicator refinement or redefinition based on evidence-based criteria, we can ensure that IHS clinical indicators mirror our key areas of concern for the AI/AN population and contribute to improving health of individuals as well as populations.

1.2   GPRA+ Overview

Collecting and reporting comparable data across all direct IHS, tribal and urban sites (I/T/Us), as well as to the larger healthcare community, is essential to the process of measuring and communicating health status and performance improvement. Improved data collection and quality provide consistent data across all I/T/Us and are critical to providing better patient care, as well as timely and accurate performance measures.

The GPRA+ Clinical Indicator Reporting system is a software tool that provides reports for local site and Area use specifically on clinical performance indicators that are based on data from the IHS Resource and Patient Management System (RPMS). For FY04, GPRA+ reports on 19 GPRA and 20 developmental indicator topics. Each indicator topic has one or more denominators and numerators defined. The denominator is the total population being reviewed; the numerator is the number of patients from the denominator who meet the logic criteria. Detailed logic for each indicator is described in section ***Error! Reference source not found.* Error! Reference source not found.**.

1.2.1   How Does GPRA+ Work?

GPRA+ produces on demand from local RPMS databases a printed or electronic report for any or all of over 200 GPRA and developmental clinical indicators, representing 32 clinical topics that are based on RPMS data. Reports display the total numbers (count) in both the denominator (total patient population evaluated) and the numerator (patients who meet the indicator criteria) as well as the percentage of total patients in the numerator.

Reports also compare the site's performance numbers in the current report period (user defined) to the previous period and to a user-defined baseline period. The purpose of having three time periods for comparison is always to be able to compare exactly the same logic across time periods. Since the details of indicator logic may

change somewhat each year, it is not accurate to compare an indicator from GPRA+ FY02 to the same indicator from GPRA+ FY03. The three time periods allow truly comparable data.

The GPRA Performance Report and the Area Director Performance Report also provide summaries of the local GPRA indicator results compared to national performance and agency goals. Users can also request patient lists for each of the measures, displaying patients who do or do not meet the indicator criteria.

A facility also can produce data files for both the GPRA Performance and the Area Director Performance reports for transmission to the Area office where an Area-wide aggregate report can be generated. (See Section **Error! Reference source not found. Error! Reference source not found.** for detailed descriptions of the different report types.)

Because GPRA indicators can change annually, GPRA+ is updated and released annually to reflect any changes. The current version 3.* adds FY 2004 indicators to the existing FY 2003 and FY 2002 clinical performance indicators.

The GPRA+ Reporting System is intended to eliminate the need for manual chart audits for evaluating and reporting the IHS clinical GPRA and developmental indicators that are based on RPMS data. To produce reports with comparable data across every facility using GPRA+, the GPRA indicator definition must be *translated* into programming code. This means that an English text expression must be defined specifically in terms of what RPMS fields to look at and what values to look for to fit the definition.

The logic that was provided to the GPRA+ application programmer was developed in conjunction with various clinical subject matter experts for the different types of indicators, i.e. the Diabetes Program reviewed and approved the logic for diabetes indicators.

GPRA+ has been described as a *scavenger hunt* for data, looking at as many RPMS applications and at as many fields as may be applicable to meet the indicator. To ensure comparable data within the agency as well as to external organizations, as much indicator logic as possible is based on standard national codes. These codes include ICD-9, CPT, LOINC, and national IHS standard codesets (e.g. Health Factors, patient education codes, etc.).

For terminology that is not standardized across each facility, such as lab tests or medications, GPRA+ uses taxonomies that can be populated by each individual facility with its own codes. (See section **Error! Reference source not found. Error! Reference source not found.** for detailed information about taxonomies.) Facilities that develop and use their own codes for IHS-specific functions such as Health Factors and patient education will find that these entries will not count toward meeting the indicator.

1.3   Key Changes for Version 3.1

One major change has been made to existing indicator logic (v3.0):

- Diabetes: Nephropathy Assessment indictor topic: the Diabetes Program has determined that a documented Estimated GFR value will NOT count as evidence of nephropathy assessment for diabetic patients for 2004. The logic has been revised to include one numerator only: evidence of positive urine protein or microalbuminuria tests.

Other logic changes to existing indicator topics include:

- Adult Immunizations: Influenza: updated the diagnosis codes that count toward meeting the numerator to include V04.81, a recent code addition.

- Women's Health: Pap Smear: removed diagnosis code V72.3 Gynecologic Examination and Refusal of Pelvic Exam (Exam code 15) from the logic that counts toward meeting the pap smear definition.

- Diabetes and Mental Health: added patient education codes beginning with "BH-" (behavioral and social health), "GAD-" (generalized anxiety disorder), and "SB-" (suicidal behavior) to logic for screening and counseling.

- Chlamydia Screening: changed denominator age range from 16-24 to 16-25, to be consistent with HEDIS definition (see section 8.6.4).

- Chlamydia Screening: added searching in V Micro, in addition to V Lab, for evidence of test.

- Tobacco Cessation: added POV or active Problem List diagnosis code 305.13 (tobacco use in remission) as definition of "Tobacco Quit"

- Intimate Partner (Domestic) Violence: added additional POV diagnosis codes as defining the numerator.

Other enhancements for version 3.1 include the following:

- Fixed reported bug that delimited file was not being created when output selection B Both Print and Delimited was chosen.
- HEDIS Report: Added report for specific HEDIS indicators; specific denominators and numerators were added to existing indicators to meet HEDIS definitions that may be different from GPRA definitions.
- Added two additional report options that allow sites more flexibility in selecting patient populations besides the GPRA Community of Residence definition: user-defined patient panel and all patients regardless of Community of Residence.

- Added an electronic delimited file format for the GPRA Performance and Area Director Performance reports designed to use with Excel to provide graphs for GPRA indicators.

1.4   Key Changes for Version 3.0

Enhancements for version 3.0 include the addition of the following new and substantially revised indicators:

- Intimate Partner (Domestic) Violence Screening (new);
- Chlamydia Screening (new);
- Nutrition and Exercise Education for At Risk Patients (revised to focus on obese patients and diabetic patients; added Medical Nutrition numerator);
- Tobacco Cessation (separated from Tobacco Use Assessment and expanded);
- Hypertension Control (new).

Significant changes to existing indicators include:
- All Diabetes indicators: three, rather than four, denominators are used, User Population, Active Diabetics (GPRA denominator), and Active Adult Diabetics;
- Diabetes: Glycemic Control: HgA1c values only; glucose has been eliminated from the logic;
- Diabetes: Glycemic Control: added all categories of control (Ideal, Good, Fair, Poor, Very Poor) to numerators;
- Diabetes: Blood Pressure Control: definition of controlled BP has been changed to less than (<) 130/80, rather than <= 130/80;
- Diabetes: Nephropathy Assessment: definition has been expanded to include Estimated GFR, in addition to positive urine protein or microalbuminuria;
- Diabetes and Mental Health: codes for depressive/anxiety disorder diagnoses have been fine tuned; GPRA+ now also looks for BHS codes as well.;
- Diabetes and Mental Health: a numerator has been added for screening or counseling;
- Adult Immunizations: Influenza: added refusals as counting toward meeting the numerator.
- Adult Immunizations: Pneumovax: added refusals as counting toward meeting the numerator.
- Women's Health: Mammogram Rates: added new GPRA denominator ages 50 through 64 (not 69);

- Alcohol Screen (FAS Prevention): added patient education as counting toward screening;
- CVD Prevention: Cholesterol Screening: revised age ranges for denominator;
- CVD Prevention: Blood Pressure Control: updated blood pressure categories to new national guidelines;
- Cardiovascular Disease: Blood Pressure Control: updated blood pressure categories to new national guidelines;

Additional key enhancements include the following.

- Changed GPRA Performance Report to include only individual GPRA denominator and numerator (previously included related numerators for the indicator).
- Changed Area Director Performance Report to include only individual GPRA denominators and numerators, as well as selected other clinical indicators.
- Changed both GPRA and Area Director Performance Reports so that sites can run locally only, or choose to export to the Area for aggregation.
- Added Performance Summary sheet at end of GPRA Performance Report and Area Director Performance Report to summarize local results against national performance for the previous two years.
- Provided option for users to select the entire user population (not just beneficiary 01 American Indian/Alaska Native) or non AI/AN population for local reporting.
- Added LOINC codes as another standard national code set that is used to identify lab tests for all relevant indicators.

2.0   Taxonomy Setup

This section describes what needs to be done to set up all taxonomies needed for the GPRA+ Clinical Performance Reporting System application.   Taxonomies are used to find data items in PCC or other RPMS applications in order to determine if a patient or visit meets the criteria for which the software is looking. Taxonomies are groupings of functionally related data elements and identify specific codes (e.g., CPT, ICD-9), code ranges, or terms that need to be used by PCC computer programs including this RPMS UDS Reporting System.

There are two different types of taxonomies distributed with the GPRA+: software-defined ("hardcoded") and site-defined.

2.1   Software-Defined Taxonomies

For data elements like diagnoses, and procedures or lab tests identified by LOINC codes, the taxonomy simply identifies the standard codes that a software program should look for. These codes are hard-coded by the programmer into several *software-defined taxonomies* that are distributed with the GPRA+ software. These taxonomies can only be updated by the GPRA+ programmer. Using standard national codes ensures comparable data within the agency as well as to external organizations.

The following taxonomies are included with the GPRA+ Reporting System and prepopulated; these taxonomies do **NOT** need to be modified by the site.

Taxonomy Name	Description	Members	Indicators Used with	√
COMMUNITY TAXONOMY (name of this taxonomy is determined by the site)	Contains all of the communities that are considered in your service area. All patients who live in these communities will be reviewed for inclusion in the report.	Communities of residence in the service area.	ALL	
SURVEILLANCE DIABETES	Contains all Diabetes ICD9 Diagnoses codes. This taxonomy will already be present on the RPMS system. This taxonomy does not need to be updated.	ICD Dx Codes 250.00-250.93	1, 1B, 2A, 2B,2C, 3A, 3B, 3C, 4A, 4B, 4C, 5A, 5B, 5C, A, D	√
BGP DEPRESSIVE DISORDERS	Contains all Depressive Disorder ICD9 codes. This taxonomy is distributed with the GPRA software and should not need to be updated.	296.00 – 313.1	A	√
BGP GPRA PREGNANCY DIAGNOSES	Contains all dxs related to pregnancy.	640.00- 648.94 651.00 -676.94 V22.0- V23.9	H	√
BGP GPRA SMOKING	Smoking related diagnoses	305.1-305.13	H	√

DXS	codes	V15.82		
BGP ASTHMA DXS	Asthma diagnoses	493-493.92	I	√
BGP HIV/AIDS DXS	Hiv/Aids diagnoses	042.-042.9, 795.71, V08.	E	√
BGP ISCHEMIC HEART DXS	Ischemic heart disease	410.0 - 412. 414.0 - 414.9 428.0 - 428.9 429.2 - 429.2	J	√
BGP ALCOHOL DXS	Contains all alcohol diagnoses	291.0 - 291.9 303.00- 303.93 305.00 - 305.03 357.5 - 357.5	G	√
BGP DV DXS	Contains all domestic violence diagnoses	995.80-995.81 V15.41-V15.49	F	
BGP PRIMARY CARE CLINICS	Contains all primary care clinic codes as defined by IHS. This taxonomy is distributed with this software package and should not need to be modified.	01, 06, 13, 20, 24, 28	2C, 3C, 4C, 5C	√
BGP CPT PAP	Contains all CPT codes that would indicate that a Pap Smear was done. This taxonomy is distributed with this software package and should not need to be modified.	88141 - 88150 88152 - 88158 88164 - 88167	6, 6A	√
BGP CPT MAMMOGRAM	Contains all CPT codes that would indicate that a Mammogram was done. This taxonomy is distributed with this software package and should not need to be modified.	76090 – 76092	7	√
BGP CPT FLU	Contains all CPT codes that would indicate that an Influenza vaccine was given. This taxonomy is distributed with this package and should not need to be modified.	90657 – 90660	24	√
BGP CPT HIV TESTS	Contains cpt codes related to HIV tests	86689, 86701-86703, 87390-87391	E	√
BGP HYSTERECTOMY CPTS	Contains all CPT codes that would indicate a hysterectomy was done	58150-58294	6,6A	
BGP SIG CPTS	Sigmoidoscopy cpts	CPT 45330-45345	C	√
BGP COLO CPTS	Colonoscopy cpts	CPT 45355-45387; 45325 (old)	C	V
BGP CD4 LOINC CODES	Contains loinc codes for CD4		E	√
BGP PCR LOINC CODES	Contains loinc codes for PCR		E	√

BGP HIV TEST LOINC CODES	Contains loinc codes for HIV		E	√
BGP CHOLESTEROL LOINC CODES	Contains loinc codes for CHOLESTEROL		D	√
BGP URINE PROTEIN LOINC CODES	Contains loinc codes for URINE PROTEIN		5	√
BGP MICROALBUM LOINC CODES	Contains loinc codes for Microalbumunuria		5	√
BGP LDL LOINC CODES	Contains loinc codes for LDL		4	√
BGP HDL LOINC CODES	Contains loinc codes for HDL		4	√
BGP TRIGLYCERIDE LOINC CODES	Contains loinc codes for Triglyceride		4	√
BGP LIPID PROFILE LOINC CODES	Contains loinc codes for LIPID PROFILE		4	√
BGP HGBAIC LOINC CODES	Contains loinc codes for HGBAIC		2	√
BGP CREATININE LOINC CODES	Contains loinc codes for CREATININE		DM	√
BGP PAP LOINC CODES	Contains loinc codes for PAP SMEAR		6	√
BGP FOBT LOINC CODES	Contains loinc codes for Fecal Occult Blood		C	√
BGP RECTAL PROCEDURE CODES	Rectal exams		C	√

2.2   Site-Defined Taxonomies

Site-defined taxonomies are used to mitigate the variations in RPMS medical terminology that is not standardized across each facility, such as lab tests or medications. This means that one site's Pap smear data can be compared to another site, even though the same term is not used for the Pap smear lab test.

For example, one site's Lab table might contain the term Glucose Test while another site's table may contain the term Glucose for the same test. RPMS PCC programs have no means for dealing with variations in spelling, spacing, and punctuation. Rather than attempting to find all potential spellings of a particular lab test, the application would look for a specific taxonomy name that has been standardized at every facility. The contents of the taxonomy are determined by the facility. In this example, the application would use the DM AUDIT GLUCOSE TESTS TAXONOMY. The individual facility will enter all varieties of spelling and punctuation for Glucose Tests used at that particular facility.

2.2.1.1   Site-Defined Clinical Taxonomies Used by GPRA+

The site's GPRA+ Implementation team will need to review the taxonomies that need to be defined by the site and make sure that all appropriate entries exist or are entered. The table below can be used as a checklist.

Detailed instructions on how to set up and check these taxonomies are included in the GPRA+ User Manual.

> **NOTE:** To provide accurate counts, you must include ALL test names that have been used by your facility since 1999, even if these codes are currently inactive. Some indicators search for tests as far back as 10 years.

Taxonomy Name	Description	Members	Indicators Used with
BGP CD4 TESTS	All CD4 Lab Tests	CD4	HIV Quality of Care
BGP GPRA FOB TESTS	All Fecal Occult Blood Lab Tests	Occult Blood Fecal Occult Blood	Colorectal Cancer Screening
BGP PAP SMEAR TAX	All Pap Smear tests	Pap Smear	Women's Health: Pap Smear
BGP HIV VIRAL LOAD TESTS **CHECK THIS NAME**	All HIV viral load tests (as measured by PCR or comparable test)	HIV Viral Load	HIV Quality of Care
BGP HIV TEST TAX	All HIV tests	HIV Tests	Prenatal HIV Testing and Education
DM AUDIT CHOLESTEROL TAX	All Total Cholesterol Tests	Cholesterol, Total Cholesterol	CVD Prevention: Cholesterol Screening
DM AUDIT CREATININE TAX	All Creatinine Tests – *NOTE:* do NOT include names of panels that creatinine test may be part of, e.g., basic metabolic panel	Creatinine	Active Adult Diabetic Patients Denominator for Diabetes indicators
DM AUDIT HDL TAX	All HDL Cholesterol Lab Tests – *NOTE:* do not include Lipid Panels in this taxonomy	HDL	Diabetes: Dyslipidemia Assessment; CVD Prevention: Lipids Assessment; Cardiovascular Disease: Lipids Assessment

Taxonomy Name	Description	Members	Indicators Used with
DM AUDIT HGB A1C TAX	All HGB A1C lab tests.	Hgb A1C, A1C, HbA1c, Hemoglobin A1C, Glycosyolated hemoglobinHgb, Glycohemoglobin A1c	Diabetes: Glycemic Control
DM AUDIT LDL CHOLESTEROL TAX	All LDL Cholesterol Lab Tests – *NOTE:* do not include Lipid Panels	LDL, LDL-C	Diabetes: Dyslipidemia Assessment; CVD Prevention: Lipids Assessment; Cardiovascular Disease: Lipids Assessment
DM AUDIT LIPID PROFILE TAX	All Lipid Profile (Panel) Lab Tests	Lipid Profile, Lipid Panel	Diabetes: Dyslipidemia Assessment; CVD Prevention: Cholesterol Screening; CVD Prevention: Lipids Assessment; Cardiovascular Disease: Lipids Assessment
DM AUDIT MICROALBUMINURIA TAX	All Microalbuminuria Lab Tests.	Microalbuminia Micral Microalbuminia, Urine A/C Ratio, AC Ratio, ACR, Microalbumin/ Creatinine Ratio, Microalbumin Random	Diabetes: Nephropathy Assessment
DM AUDIT TRIGLYCERIDE TAX	All Triglyceride Lab Tests – *NOTE:* do not include Lipid Panels	Triglyceride	Diabetes: Dyslipidemia Assessment; CVD Prevention: Lipids Assessment; Cardiovascular Disease: Lipids Assessment
DM AUDIT URINE PROTEIN TAX	All Urine Protein Lab Tests.	Urine Protein, Urine Protein Screen	Diabetes: Nephropathy Assessment

3.0   Installation Notes

Prefix: BGP

Current Version: 3.1

> **Note**: Read Entire Notes File Prior to Attempting Any Installation.

3.1   General Information

Make a copy of this distribution for off-line storage. Print all notes/readme files.

It is recommended that the terminal output during the installation be captured using an auxport printer attached to the terminal at which you are performing the software installation. This will insure a printed audit trail if any problems should arise.

3.2   Contents of Distribution

- bgp_0310.k—Kids file containing software
- bgp_031i.pdf—Installation guide in PDF format
- bgp_031t.pdf—Technical manual in PDF format
- bgp_031u.pdf—User's guide in PDF format

3.3   Requirements

- Kernel v8.0 or higher
- FileMan v21 or higher
- IHS Patient Dictionaries (AUPN) v99.1 through patch 12
- PCC Management Reports v3.0 through patch 14
- Taxonomy System v5.1
- XB/ZIB Utilities v3.0 through patch 9

4.0   Installation Instructions

In all UCI's running the IHS RPMS GPRA Reporting System:

1. Ensure that users are unable to use the GPRA Reporting System for the duration of this installation. Installation takes approximately 5 minutes.

2. Save all routines (^%RS (MSM) or ^%RO (CACHE)) and globals (^%GS (MSM) or ^%GO (CACHE) in the BGP* namespace for use in returning to your existing version, if needed.

    > **Note**: If this is a first time install, there will be no routines or globals in this namespace.

3. Delete all routines (^%RDEL(MSM) or ^%RDELETE(CACHE)) in the BGP namespace (if any exist).

    > **Note**: This installation is a KIDS install. If you have any questions on how to do a KIDS installation, please contact your Area information systems support personnel.

4. Install bgp_0310.k. This file is the KIDS file for GPRA Reporting System.

5. Assign security key BGPZMENU to all users of this package at the service unit level. If this package is being installed at an Area office, the BGPZMENU and BGPZAREA keys also need to be assigned to users of the package.

5.0   Sample Installation

```
Select Kernel Installation & Distribution System Option:


   KIDS    Kernel Installation & Distribution System ...
   NTEG    Build an 'NTEG' routine for a package
   PG      Programmer mode
           Calculate and Show Checksum Values
           Clean Error Trap
           Delete Unreferenced Options
           Error Processing ...
           Global Block Count
           List Global
           Map Pointer Relations
           Number base changer
           Routine Tools ...
           Test an option not in your menu

Select Programmer Options Option: KIDS  Kernel Installation &
Distribution System


           Edits and Distribution ...
           Utilities ...
           Installation ...

Select Kernel Installation & Distribution System Option: Installation


   1        Load a Distribution
   2        Verify Checksums in Transport Global
   3        Print Transport Global
   4        Compare Transport Global to Current System
   5        Backup a Transport Global
   6        Install Package(s)
            Restart Install of Package(s)
            Unload a Distribution

Select Installation Option: 1  Load a Distribution
Enter a Host File: c:\rpms\bgp\bgp_0310.k

KIDS Distribution saved on Apr 13, 2004@12:00:05
Comment: IHS/RPMS GPRA REPORTING V3.1 K 4-13-04

This Distribution contains Transport Globals for the following
Package(s):
     IHS GPRA REPORTING 3.1
The following Entries already exist in the INSTALL file:

IHS GPRA REPORTING 3.1   Install Completed
was loaded on Apr 13, 2004@08:14:11
OK to continue? NO// YES

Want to Continue with Load? YES//
```

```
Loading Distribution...

Want to RUN the Environment Check Routine? YES//
   IHS GPRA REPORTING 3.1
Will first run the Environment Check Routine, BGPPOST

Use INSTALL NAME: IHS GPRA REPORTING 3.1 to install this Distribution.



   1        Load a Distribution
   2        Verify Checksums in Transport Global
   3        Print Transport Global
   4        Compare Transport Global to Current System
   5        Backup a Transport Global
   6        Install Package(s)
            Restart Install of Package(s)
            Unload a Distribution

Select Installation Option: INstall Package(s)
Select INSTALL NAME:   IHS GPRA REPORTING 3.1       Loaded from
Distribution
     Loaded from Distribution  4/13/04@13:17:06
      => IHS/RPMS GPRA REPORTING V3.1 K 4-13-04  ;Created on Apr 13,
2004@12:

This Distribution was loaded on Apr 13, 2004@13:17:06 with header of
IHS/RPMS GPRA REPORTING V3.1 K 4-13-04  ;Created on Apr 13, 2004@12:00:05
It consisted of the following Install(s):
IHS GPRA REPORTING 3.1

   IHS GPRA REPORTING 3.1
Will first run the Environment Check Routine, BGPPOST


Install Questions for IHS GPRA REPORTING 3.1

Incoming Files:


   90240.01  BGP IHS GPRA DATA 02
Note:  You already have the 'BGP IHS GPRA DATA 02' File.


   90241.01  BGP CONTROL FILE  (including data)
Note:  You already have the 'BGP CONTROL FILE' File.
I will OVERWRITE your data with mine.


   90241.02  BGP SITE PARAMETERS
Note:  You already have the 'BGP SITE PARAMETERS' File.


   90242     BGP INDIVIDUAL INDICATOR DEFINITIONS  (including data)
Note:  You already have the 'BGP INDIVIDUAL INDICATOR DEFINITIONS' File.
I will OVERWRITE your data with mine.
```

```
   90242.01  BGP INDICATORS  (including data)
Note:  You already have the 'BGP INDICATORS' File.
I will OVERWRITE your data with mine.


   90243     BGP 03 DATA CURRENT
Note:  You already have the 'BGP 03 DATA CURRENT' File.


   90243.01  BGP 03 DATA PREVIOUS
Note:  You already have the 'BGP 03 DATA PREVIOUS' File.


   90243.02  BGP 03 DATA BASELINE
Note:  You already have the 'BGP 03 DATA BASELINE' File.


   90244.01  BGP 04 INDICATORS  (including data)
Note:  You already have the 'BGP 04 INDICATORS' File.
I will OVERWRITE your data with mine.


   90244.02  BGP 04 INDIVIDUAL INDICATORS  (including data)
Note:  You already have the 'BGP 04 INDIVIDUAL INDICATORS' File.
I will OVERWRITE your data with mine.


   90244.03  BGP 04 DATA CURRENT
Note:  You already have the 'BGP 04 DATA CURRENT' File.


   90244.04  BGP 04 DATA PREVIOUS
Note:  You already have the 'BGP 04 DATA PREVIOUS' File.


   90244.05  BGP 04 DATA BASELINE
Note:  You already have the 'BGP 04 DATA BASELINE' File.


   90370.01  BGP 04 HEDIS INDICATORS  (including data)
Note:  You already have the 'BGP 04 HEDIS INDICATORS' File.
I will OVERWRITE your data with mine.


   90370.02  BGP 04 HEDIS INDIVIDUAL INDICATORS  (including data)
Note:  You already have the 'BGP 04 HEDIS INDIVIDUAL INDICATORS' File.
I will OVERWRITE your data with mine.


   90370.03  BGP 04 HEDIS DATA CURRENT
Note:  You already have the 'BGP 04 HEDIS DATA CURRENT' File.


   90370.04  BGP 04 HEDIS DATA PREVIOUS
```

```
Note:  You already have the 'BGP 04 HEDIS DATA PREVIOUS' File.


   90370.05  BGP 04 HEDIS DATA BASELINE
Note:  You already have the 'BGP 04 HEDIS DATA BASELINE' File.



Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME//

qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
qqqqqqq

 Install Started for IHS GPRA REPORTING 3.1 :
               Apr 13, 2004@13:17:22

 Installing Routines:
               Apr 13, 2004@13:17:40

 Running Pre-Install Routine: PRE^BGPPOST

 Installing Data Dictionaries:
....................................................................
............................
 Installing Data Dictionaries:
....................................................................
............................
 Installing Data Dictionaries:
....................................................................
............................
 Installing Data Dictionaries:
....................................................................
............................
 Installing Data Dictionaries:
....................................................................
............................
               Apr 13, 2004@13:18:12

 Installing Data: ..............
               Apr 13, 2004@13:18:19

 Installing PACKAGE COMPONENTS:

 Installing SECURITY KEY

 Installing INPUT TEMPLATE

 Installing PROTOCOL

 Installing LIST TEMPLATE

 Installing OPTION
```

```
                    Apr 13, 2004@13:18:21

 Running Post-Install Routine: POST^BGPPOST
Updating [BGP ALCOHOL DXS] taxonomy...
Updating [BGP ASTHMA DXS] taxonomy...
Updating [BGP CPT FLU] taxonomy...
Updating [BGP CPT HIV TESTS] taxonomy...
Updating [BGP CPT MAMMOGRAM] taxonomy...
Updating [BGP CPT PAP] taxonomy...
Updating [BGP DEPRESSIVE DISORDERS] taxonomy...
Updating [BGP DV DXS] taxonomy...
Updating [BGP GPRA PREGNANCY DIAGNOSES] taxonomy...
Updating [BGP GPRA SMOKING DXS] taxonomy...
Updating [BGP HIV TEST LOINC CODES] taxonomy...
Updating [BGP HIV/AIDS DXS] taxonomy...
Updating [BGP HYSTERECTOMY CPTS] taxonomy...
Updating [BGP ISCHEMIC HEART DXS] taxonomy...
Updating [BGP FOBT LOINC CODES] taxonomy...
Updating [BGP RECTAL PROCEDURE CODES] taxonomy...
Updating [BGP SIG CPTS] taxonomy...
Updating [BGP COLO CPTS] taxonomy...
Updating [BGP CHLAMYDIA CPTS] taxonomy...
Updating [BGP CHLAMYDIA LOINC CODES] taxonomy...
Updating [BGP VIRAL LOAD LOINC CODES] taxonomy...
Updating [BGP CD4 LOINC CODES] taxonomy...
Updating [BGP CHOLESTEROL LOINC CODES] taxonomy...
Updating [BGP CREATININE LOINC CODES] taxonomy...
Updating [BGP HDL LOINC CODES] taxonomy...
Updating [BGP HGBA1C LOINC CODES] taxonomy...
Updating [BGP LDL LOINC CODES] taxonomy...
Updating [BGP LIPID PROFILE LOINC CODES] taxonomy...
Updating [BGP MICROALBUM LOINC CODES] taxonomy...
Updating [BGP PAP LOINC CODES] taxonomy...
Updating [BGP TRIGLYCERIDE LOINC CODES] taxonomy...
Updating [BGP URINE PROTEIN LOINC CODES] taxonomy...
Creating Primary Care Clinics taxonomy...

 Updating Routine file...

 Updating KIDS files...

 IHS GPRA REPORTING 3.1 Installed.
                          IHS GPRA REPORTING 3.1


Install Completed




   1       Load a Distribution
   2       Verify Checksums in Transport Global
   3       Print Transport Global
   4       Compare Transport Global to Current System
   5       Backup a Transport Global
   6       Install Package(s)
```
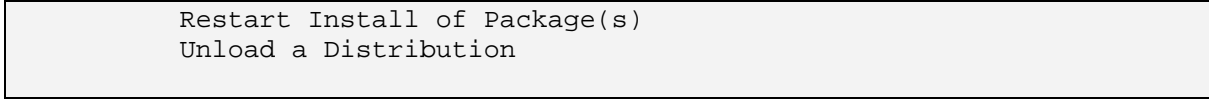
```
        Restart Install of Package(s)
        Unload a Distribution
```

Figure 5-1: Sample Installation Screenshot

6.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the ITSC Help Desk by:

Phone: (505) 248-4371 or

                 (888) 830-7280

Fax: (505) 248-4363

Web: http://www.rpms.ihs.gov/TechSupp.asp

Email: ITSCHelp@mail.ihs.gov