

# *Extending the Value of ACG-Rx*

**A Pharmacy Episode Grouping Strategy – PEGS™  
– Links Risk Scores and Current Treatment**



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## ***Pharmacy claims data -- High value analytic potential***

- ▶ **Pharmacy claims are underutilized analytically as a means to understand the quality and effectiveness of health care delivery**
- ▶ **The relative immediacy and accuracy of pharmacy claims illuminate treatment interactions between patients, providers, and medications in a comprehensive plan context**
- ▶ **Drug therapies are at the core of treatment strategies for addressing chronic diseases, which drive 50% of total health care costs – 70 million people have a chronic disease**
- ▶ **Half the people with chronic disease don't comply with drug treatment plans, resulting in**
  - **Accelerating disease progression and use of health care resources**
  - **Costly waste**
  - **Avoidable hospitalizations, accounting for perhaps 40% of total admissions**



# Opportunity is replete with Challenges

- ▶ **Opportunities** - Pharmacy claims offer valid, relevant, near-to-real-time evidence of patient/provider treatment interaction and can serve as a point-of-entry for profiles that prioritize intervention and management opportunities
- ▶ **Challenges** - Pharmacy claims are
  - ▶ voluminous, particularly for elderly in Medicare Advantage, Medicaid, and Special Needs plans;
  - ▶ difficult to classify relative to disease condition, as one drug may be used to treat a variety of medical conditions;
  - ▶ Controversial, in that any relationship between payments to providers based on patient medication management and either volume or selection of particular drugs could raise questions concerning the objectivity and appropriateness of prescribing decisions



# Solutions

- ▶ **ACG-Rx**, which utilizes NDC codes from pharmacy claims to assess and predict risk for patients and populations with rates of accuracy similar to diagnosis-based methods and classifies patients to pharmacy-based medical groups (RxMGs) that largely parallel diagnosis-based condition categories
- ▶ **PEGS™** – Pharmacy Episode Grouping Strategy – a PDM-developed method for grouping, categorizing, and profiling pharmacy claims to assist health care managers in determining (a) medication treatment experience, outcomes, and medication compliance behaviors of patients and (b) appropriate drug prescribing, medication coordination, and cost-efficiency of health care providers.
- ▶ Integration of JHU's ACG, ACG-PM and ACG-Rx with PEGS pharmacy episode logic and PPRx Predominant Prescriber logic and traditional pharmacy metrics facilitates timely and accurate analysis, supporting relevant, effective interventions.



## ***Examples of what we can learn from Integration of ACG-Rx and PEGS episode analysis***

- ▶ **Which members have Congestive Heart Failure (or another chronic medical condition or conditions) and how are they being treated?**
- ▶ **Which patients have multiple conditions and what is the medication regimen? Multi-drug and/or concurrent drug treatment episodes?**
- ▶ **Among those with CHF (or another condition), who is low, moderate, or high risk and what medications are used in their management?**
- ▶ **Who is each patient's Predominant Prescriber?**
- ▶ **What is the role/influence of specialists vs PCPs in treatment for each condition and is this reflected in drug utilization and management?**
- ▶ **How many prescribers contribute? Is medication appropriate and coordinated among providers?**
- ▶ **What is the current cost of drug treatment for the condition? In total?**
- ▶ **Is the patient compliant with maintenance medications?**
- ▶ **What is each patient's level of risk and projected cost in the next 12 months? For prescription drugs? For total medical care?**



## ***Evidence for Action !***

- ▶ **PEGS provides bridges between risk scores and condition categorizations derived from retrospective data and near-current medication treatment status and patient/provider relationships**
- ▶ **PEGS can be updated frequently and maintained near to “real-time,” enhancing relevance for potential quality and disease management interventions**
- ▶ **ACG-Rx risk assessment and prediction as well as RxMG classifications can be applied to “rolling years” to bring them as near to current pharmacy utilization and episode information as possible**
  - **Claim lag for pharmacy claims is negligible compared to lag for medical claims, particularly hospital claims**



## **PEGS™ -- Pharmacy Episode Grouping Strategy**

- ▶ **Processes pharmaceutical claims for information content, rather than for payment, but does include financial data**
- ▶ **It addresses 100% of a member's claims for prescription drugs, establishing episodes for sequential scripts for the same drug and for related medication management patterns.**
- ▶ **It is neutral relative to drug type, diagnosis, and provider specialty.**
- ▶ **It differentiates episode categories based upon time windows relating to the prescribing physician's use instructions and patient compliance:**
  - **Acute Intervention**
  - **Extended Intervention**
  - **Maintenance episodes.**
- ▶ **It reflects treatment complexity identifying episodes that are components of a multi-drug therapeutic strategy**
- ▶ **It identifies episodes that are concurrent with those of other episodes**
- ▶ **It manages "open" and "closed" episodes to facilitate longitudinal analyses**
- ▶ **It identifies lapses in expected "fill intervals" for maintenance episodes, signifying probable non-compliance**



## **PEGS<sup>tm</sup> Description cont.**

- ▶ **PEGS methodology for episode creation uses objective rules and measures that are valid and consistent, regardless of medical condition, treatment setting, or drug type**
- ▶ **PEGS grouping logic is transparent and “evidential,” preserving prescribing providers’ decisions**
  - **No Barrier to Plan or Physician Acceptance**
  - **PEGS evidential approach avoids controversies associated with imposed clinical constraints**
- ▶ **PEGS is comprehensive: it applies to all members/patients, all plan/insurance products, all scripts, all prescribing provider medical specialties, all medical conditions**



# Example of Patient Episode List, by Type, generated monthly, quarterly, or by year (calendar or rolling 12)

## Patient Polypharm Report

Member ID: ██████████  
 Member Name: ██████████  
 Reporting Period: 1/1/2006 - 12/31/2006

### Patient Polypharm Report

Concurrent		Non-Concurrent								
Therapeutic Class L1	Drug ID	Desc	Episode #	Type	Tier	Prescriber MD	Scripts	Days Supply	\$ Paid	\$ CoPay
immunologic agents	d01133	Gammagard	001	Acute Intervention	1	<u>1012621</u>	1	1	426	0
			002	Acute Intervention	1	<u>1012621</u>	1	1	426	0
cardiovascular agents	d00134	Lopressor	003	Maintenance	1	<u>P000287</u>	6	180	21	2
immunologic agents	d01133	Gammagard	004	Acute Intervention	1	<u>1012621</u>	1	1	426	0
cardiovascular agents	d00253	Hydrochlorothiazide	005	Acute Intervention	1	<u>P000287</u>	1	30	11	0
	d00732	Lisinopril	006	Acute Intervention	1	<u>P000287</u>	1	30	12	0
anti-infectives/gastrointestinal	d00379	Sulfasalazine	007	Extended Intervention	1	<u>1012621</u>	2	68	43	2
miscellaneous agents	d00818	Ridaura	008	Extended Intervention	2	<u>1012621</u>	2	60	439	6
			009	Maintenance	1	<u>1012621</u>	3	30	1,760	3
immunologic agents	d01133	Gammagard	010	Acute Intervention	1	<u>1012621</u>	1	1	465	1
anti-infectives	d04500	Avelox	011	Acute Intervention	2	<u>1012621</u>	1	30	50	3
			012	Acute Intervention	1	<u>1012621</u>	1	1	465	1
immunologic agents	d01133	Gammagard	013	Acute Intervention	1	<u>1012621</u>	1	1	465	1
			014	Acute Intervention	1	<u>1012621</u>	1	1	465	1
metabolic agents	d04105	Lipitor	015	Acute Intervention	2	<u>P000287</u>	1	30	104	3



## **PEGS logic is complemented by “Predominant Prescriber (PPRx)” Algorithm**

- ▶ **Identifies the physician who writes most scripts for a patient**
- ▶ **Shows which physician has the most influence over Rx costs and treatment experience**
- ▶ **Identifies physicians who are "starting points" for disease management interventions**
- ▶ **Identifies physicians who may be prescribing inappropriately**
- ▶ **Patients without a PPRx may need intervention for medication coordination and management**

### **Provider Detail:**

<b>Provider ID</b>	<b>First Name</b>	<b>Last Name</b>	<b>Is Predominant Prescriber</b>	<b>Amount Paid</b>	<b>Script Count</b>
<u>P000287</u>	GEORGE	GAVIN	Yes	3,847	25
<u>1503476</u>	LEE	SUNG	No	554	5
<u>P001480</u>	ANTOINE F.	CAWOG	No	1,536	3
<u>P000286</u>	FRANCIS	MEYERS	No	7	1



## ***PEGS and PPRx are compatible with risk prediction and condition categorization methods***

- ▶ **JHU risk assessment and prediction methods**
  - **ACG**
  - **ACG-PM**
  - **ACG-Rx**
- ▶ **ACG-Rx grouping methods for creating RxMGs**
- ▶ **CMS HCC and HCCRx risk assessment and prediction methods and medical condition categorization**
- ▶ **Other methods**

### **Patient Report (Pharmacy claims only, with ACG-Rx)**

<b>Member ID:</b>	<b>[REDACTED]</b>	<b>Pharmacy Cost Band:</b>	<b>7</b>
<b>Member Name:</b>	<b>[REDACTED]</b>	<b>Rescaled Pharmacy Cost Index:</b>	<b>6.04</b>
<b>Reporting Period:</b>	<b>1/1/2007 - 12/31/2007</b>	<b>Prob High Pharmacy Cost:</b>	<b>0.84</b>
		<b>Prob High Total Cost:</b>	<b>0.22</b>

### **Patient Summary**

# Drug IDs	# New Rx	# Refill Rx	# Abuse Potential	# prescribing MDs	# months >5 scripts	# RxMG	\$ Total
20	12	22	0	4	2	9	\$5,966.56



# Example: Maintenance Episodes

## Pharmacy Based Medical Groups

RxMGs	Description	RxMG Totals \$
ALLx030	Allergy/Immunology / Chronic Inflammatory	5
ALLx040	Allergy/Immunology / Immune Disorders	5,221
CARx010	Cardiovascular / Chronic Medical	7
CARx030	Cardiovascular / High Blood Pressure	261
CARx040	Cardiovascular / Hyperlipidemia	162
INFx020	Infections / Acute Minor	15
MUSx020	Musculoskeletal / Inflammatory Conditions	103
SKNx020	Skin / Acute and Recurrent	181
ZZZx000	Other and Non-Specific Medications	11

## Episodes by Type

Maintenance			Extended Intervention		Acute Intervention						Total \$	\$PMPM
Eps#	Drug ID	Description	Begin Date	End Date	CSA	# Scripts	MD	CON	Days Supply	Total \$	\$PMPM	
003	<u>d00134</u>	Lopressor	02/04/2006	09/04/2007	N	3	N	Y	90	17	1	
018	<u>d01133</u>	Gammagard	08/09/2006	11/15/2007	N	10	N	Y	210	5,221	435	
019	<u>d00689</u>	Amlodipine Besylate	08/14/2006	03/19/2007	N	1	Y	Y	30	106	9	
024	<u>d00746</u>	Simvastatin	01/11/2007	04/11/2007	N	3	N	Y	90	50	4	

## NDC

NDC	NDC Description	B/G	Drug ID	Begin Date	End Date	Provider ID	CON	MD	CSA	Script Count	Quantity	Days	Total \$	\$PMPM
00172436460	labetalol hydrochloride	G	d00016	01/15/2007	03/19/2007	<u>P00028Z</u>	Y	N	N	2	4	60	25	2



# Example: Extended Interventions

## Pharmacy Based Medical Groups

RxMGs	Description	RxMG Totals \$
ALLx030	Allergy/Immunology / Chronic Inflammatory	5
ALLx040	Allergy/Immunology / Immune Disorders	5,221
CARx010	Cardiovascular / Chronic Medical	7
CARx030	Cardiovascular / High Blood Pressure	261
CARx040	Cardiovascular / Hyperlipidemia	162
INFx020	Infections / Acute Minor	15
MUSx020	Musculoskeletal / Inflammatory Conditions	103
SKNx020	Skin / Acute and Recurrent	181
ZZZx000	Other and Non-Specific Medications	11

## Episodes by Type

Maintenance		Extended Intervention			Acute Intervention						
Eps#	Drug ID	Description	Begin Date	End Date	CSA	# Scripts	MD	CON	Days Supply	Total \$	\$PMPM
021	<u>d00253</u>	Hydrochlorothiazide	10/15/2006	03/19/2007	N	1	Y	Y	30	4	0

## NDC

NDC	NDC Description	B/G	Drug ID	Begin Date	End Date	Provider ID	CON	MD	CSA	Script Count	Quantity	Days	Total \$	\$PMPM
00172208360	hydrochlorothiazide	G	d00253	10/15/2006	03/19/2007	<u>P000287</u>	Y	Y	N	1	2	30	4	0
				12/08/2007	01/07/2008	<u>P000287</u>	Y	N	N	1	2	30	9	1



# Acute Interventions

## Pharmacy Based Medical Groups

RxMGs	Description	RxMG Totals \$
ALLx030	Allergy/Immunology / Chronic Inflammatory	5
ALLx040	Allergy/Immunology / Immune Disorders	5,221
CARx010	Cardiovascular / Chronic Medical	7
CARx030	Cardiovascular / High Blood Pressure	261
CARx040	Cardiovascular / Hyperlipidemia	162
INFx020	Infections / Acute Minor	15
MUSx020	Musculoskeletal / Inflammatory Conditions	103
SKNx020	Skin / Acute and Recurrent	181
ZZZx000	Other and Non-Specific Medications	11

## Episodes by Type

Eps#	Maintenance		Extended Intervention		Acute Intervention				Days Supply	Total \$	\$PMPM
	Drug ID	Description	Begin Date	End Date	CSA	# Scripts	MD	CON			
023	d04105	Lipitor	01/05/2007	02/04/2007	N	1	N	Y	30	112	9
025	d00016	Labetalol Hydrochloride	01/15/2007	03/19/2007	N	2	N	Y	60	25	2
026	d00250	Myochrysin	02/19/2007	02/26/2007	N	1	Y	Y	7	103	9
027	d01300	Elocon	04/03/2007	04/08/2007	N	1	Y	Y	5	46	4
028	d00070	Furosemide	05/12/2007	07/30/2007	N	2	Y	Y	64	7	1
029	d00345	K + Potassium	05/12/2007	06/11/2007	N	1	Y	Y	30	11	1
030	d01294	Fluocinonide	06/05/2007	06/12/2007	N	1	Y	Y	7	27	2
031	d03205	Anucort-HC	06/24/2007	07/01/2007	N	1	N	Y	7	28	2
032	d01291	Desoximetasone	08/07/2007	08/12/2007	N	1	N	Y	5	80	7
033	d00124	Septra DS	08/15/2007	08/25/2007	N	1	N	Y	10	7	1
034	d00096	Cephalexin Monohydrate	09/07/2007	09/17/2007	N	1	N	Y	10	8	1
035	d06662	Exforge	10/25/2007	11/24/2007	N	1	Y	Y	30	101	8
036	d00350	PredniSONE	11/19/2007	12/05/2007	N	1	N	Y	16	5	0
037	d00253	Hydrochlorothiazide	12/08/2007	01/07/2008	N	1	N	Y	30	9	1

## NDC

NDC	NDC Description	B/G	Drug ID	Begin Date	End Date	Provider ID	CON	MD	CSA	Script Count	Quantity	Days	Total \$	\$PMPM
00093008801	sulfamethoxazole	G	d00124	08/15/2007	08/25/2007	P000287	Y	N	N	1	2	10	7	1



# Provider Perspectives

## Provider Pharmacy Report

**Provider ID:** P000287  
**Specialty:** Pediatric Medicine (37)  
**Medical Group:** HealthFirst Associates  
**Patients ACG-RX Average Risk Score:** 1.23  
**Reporting Period:** Jan 2007 / Jan 2008

<b># Patient Whom Drug is Prescribed:</b>	30	<b>Patient DrugID This MD:</b>	289	
<b># Patient For Whom Predominant Patient Drug ID ALL MDs:</b>	17	<b>Average # Drug IDs/Patient This MD:</b>	9.63	
<b>Average # Drug IDs/Patient All MD:</b>	15.83	<b>% DrugIDs This MD:</b>	60.84%	
<b>Patient RxScripts(N&amp;R) ALL MD:</b>	1,729	<b>Patient RxScripts(N&amp;R) This MD:</b>	862	<b>Total \$ All RxScripts This MD:</b> 50,063
<b>Average # Scripts/Patient All MDs:</b>	57.63	<b>Average # Scripts/Patient This MD:</b>	28.73	<b>Average \$Rx/Patient This MD:</b> 58
<b>Total \$ All RxScripts All MD:</b>	118,951	<b>% Scripts This MD:</b>	49.86%	<b>% \$ RxScripts This MD:</b> 42.09%
<b>Average \$Rx/Patient All MDs:</b>	69			



# Provider Perspectives

PPRx Patients' RXMGs:

Rx MG Code	Description	Count	ALL MDs
ALLx010	Allergy/Immunology / Acute Minor	2	\$173
ALLx030	Allergy/Immunology / Chronic Inflammatory	7	\$63
ALLx040	Allergy/Immunology / Immune Disorders	1	\$3,171
ALLx050	Allergy/Immunology / Transplant	1	\$766
CARx010	Cardiovascular / Chronic Medical	15	\$498
CARx020	Cardiovascular / Congestive Heart Failure	2	\$49
CARx030	Cardiovascular / High Blood Pressure	24	\$5,798
CARx040	Cardiovascular / Hyperlipidemia	14	\$4,136
CARx050	Cardiovascular / Vascular Disorders	6	\$4,389
ENDx010	Endocrine / Bone Disorders	2	\$1,109
ENDx030	Endocrine / Diabetes With Insulin	3	\$715
ENDx040	Endocrine / Diabetes Without Insulin	8	\$2,028
ENDx050	Endocrine / Thyroid Disorders	8	\$524
EYEx010	Eye / Acute Minor: Curative	2	\$71
EYEx020	Eye / Acute Minor: Palliative	2	\$88
GASx010	Gastrointestinal/Hepatic / Acute Minor	3	\$74
GASx060	Gastrointestinal/Hepatic / Peptic Disease	8	\$664

The PPRx Patients' Pharmacy Episodes	Episode Count	Other MDs	This MD	\$ All MDs	\$ This MD
<b>Episode Type</b>					
<b>Intervention – Maintenance</b>	34	24	10	\$1,080	\$450
<b>MultiDrug</b>	12	8	4	\$360	\$180
<b>Concurrent</b>	22	14	8	\$630	\$360
<b>Intervention – Acute</b>	33	13	20	\$585	\$900
<b>MultiDrug</b>	11	8	3	\$360	\$135
<b>Concurrent</b>	21	9	12	\$405	\$540
<b>Intervention - Extended</b>	33	18	15	\$810	\$675
<b>MultiDrug</b>	11	4	7	\$180	\$315
<b>Concurrent</b>	21	11	10	\$495	\$450



# Provider Perspectives

## MD's Most Frequently prescribed DrugID (All Patients):

Drug ID	Description	Tier	Brand Generic	# Patients	# Scripts	# New	# Refill	Abuse Potential	Quantity	Days Supply	Total Dollars	Avg \$/Scripts
d00253	Hydrochlorothiazid	1	G	8	47	6	5	N	94	1,398	\$255	\$5
d00134	Lopressor	1	G	9	45	8	4	N	90	1,334	\$549	\$12
d00070	Furosemide	1	G	13	41	10	7	N	82	1,184	\$186	\$5
d00746	Simvastatin	1	G	9	40	8	5	N	80	1,179	\$1,726	\$43
d00278	Levothroid	1	G	7	39	4	5	N	78	1,170	\$461	\$12
d03807	Fortamet	1	G	6	37	5	4	N	90	1,110	\$681	\$18
d00732	Lisinopril	1	G	6	35	5	5	N	70	1,048	\$392	\$11
d04258	Clopidogrel	2	B	5	30	3	4	N	60	900	\$3,806	\$127
d00248	DiaBeta	1	G	4	28	3	3	N	72	840	\$420	\$15
d00689	Amlodipine Besylate	1	G	6	23	6	3	N	46	690	\$706	\$31
d01288	Clobetasol Propionate	1	G	2	20	2	1	N	40	263	\$265	\$13
d00350	PredniSONE	1	G	6	18	5	3	N	35	477	\$57	\$3
d00004	Atenolol	1	G	3	17	2	3	N	34	510	\$105	\$6
d04824	Zetia	2	B	3	16	3	1	N	32	480	\$1,392	\$87
d00021	Ranitidine Hydrochloride	1	G	4	14	2	3	N	28	420	\$117	\$8



# Drug perspectives

Home Help Logout



Plan Data Management

Shared Reports My Reports Ad-Hoc Report Ad-Hoc Document My Subscriptions History List Preferences Search

RxProfiler > My Reports > Joes Reports > AdHoc Report for Episode and Drug

File View Data Format

Last update: 3/31/08



Row Axis Values Font Size **B** *I* U \$ % , .00 .00

PAGE-BY: Calendar Year Month 200612 NDC Description: fentanyl

Data rows: 5 Data columns: 1

HIC Number	First Name	Last Name	Episode Count	Episode Type	Prescriber MD Is Predominant Prescriber	Total Rx \$
22	[REDACTED]		001	Maintenance	1514972 No	155
22	[REDACTED]		020	Acute Intervention	P001475 No	322
22	[REDACTED]	HVAR	029	Extended Intervention	7416117 Yes	99
22	[REDACTED]	KY	013	Maintenance	P001475 No	99
22	[REDACTED]		002	Maintenance	P006005 No	233



# Methodology

- ▶ Pharmacy episode categories are based on a combination of a prescribing physician's use recommendations, recorded on the claim as "supply," and evidence of a patient's utilization in the form of fill dates and intervals between fill dates in relation to drug supply.
- ▶ Episodes are constructed using DrugID, to eliminate the superficial differences for identical drugs that are embodied in NDCs
- ▶ Episodes formation is an iterative process
  - Step one identifies and sequences scripts by Drug ID and fill date
  - Step two classifies episodes by type based on interval relationships between fill dates and days supply. Different rules apply to establish mutually distinct categories for "maintenance," "extended," and "acute" episodes
  - Step three establishes whether episodes are initiated in a multi-drug context and whether a supply for one drug is concurrent with at least one other drug
  - Step four identifies gaps between fills that suggest non-compliance with usage recommendations
- ▶ Longitudinal analysis is facilitated by rules to indicate whether an episode is on-going or closed and for initiating a new episode of a previously prescribed drug



## *What do you do with the information?*

### **Medical and Disease Management**

- ▶ **Identify and stratify members for disease management**
  - Risk scores stratified from high to low, by medical condition (RxMG)
  - Episodes -- what drugs, treatment intensity, prescriber coordination, patient compliance/non-compliance
- ▶ **Support providers for information-driven interventions**
  - PPRx – the Predominant Prescriber algorithm -- identifies which provider is most influential in determining a patient's treatments
  - Give providers information on all episodes for their patients, regardless of prescribing MD
- ▶ **Target interventions for future high cost members**
  - PEGS logic shows how high risk patients are being treated, by whom, with what drugs, and at what cost.
- ▶ **Review poly-pharmacy patients**
  - Target review for medication coordination, potential reduction in drugs/costs
- ▶ **Identify out-of-compliance patients**
  - Patient Profiles



## *What do you do with the information?*

### **Network Management**

#### ▶ **Assess and Compare treatment modes and costs**

- Medical condition and episodes
- Predominant Prescribers (PPRx) by quarter and year
- Provider Specialty

### **Fraud Waste and Abuse**

#### ▶ **Detect Fraud or Abuse within my organization or among members**

- Target and prioritize potential abuse for investigation
  - inappropriate drug use by patients
  - suspicious provider prescribing pattern

#### ▶ **Members using different providers to fill the same prescription**

- PEGS episodes quickly identify concurrent episodes of the same drug by different prescribers



# ***PEGS Application Vehicle: a comprehensive analytic system, “profiling” the interactions of patients, providers and drugs***

## **CURRENT, RELEVANT, VALID**

- ▶ The first software release operates on prescription pharmacy claims; the second will include comprehensive medical claims and expanded “profile” reports. Pharmacy results, however, are relevant to the entire treatment context and more current than any other type of medical claims analysis. Valid pharmacy episode information can be assembled from a base of 6 months of claims, and updated at monthly or quarterly intervals. PEGS pharmacy episodes and other utilization and quality metrics produced are as close to “real-time” as can be achieved using billing claims compared to medical claims.

## **PROPRIETARY LOGIC**

- ▶ PDM’s application vehicle incorporates two innovative methodologies:
  - Pharmacy Episode Grouping Strategy (PEGS™, patent pending), a comprehensive, clinically neutral methodology developed by PDM for creating and classifying pharmacy claims by therapeutic mode.
  - Predominant Prescriber (PPRx) and Predominant Provider (PPTx), PDM-developed algorithms for identifying the physicians with most influence over a member’s prescription drug use and general treatment strategies and costs.

## **STRATEGIC ALLIANCE**

- The Johns Hopkins University Adjusted Clinical Groups Pharmacy model (ACG-Rx) for grouping drugs by implied diagnosis category and for predicting members’ risk of expenditures for pharmacy and for total medical costs is totally integrated within the application.

## **TECHNOLOGY**

- ▶ Sophisticated Data mart - Microsoft Sql Server provides the OLAP database platform and integrates with our Business Intelligence tool. Microsoft Analysis services performs rapid data crunching, giving users more time for analysis.
- ▶ Dependable Business Intelligence software provides the ability to provide a standard report suite and gives the user adhoc report capability. The Microstrategy tool is flexible enough to allow for multiple distribution methods to users in batch or real time.



## *For more information*

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