Disease Management Results

Experience With Disease Management
In the Commercial Sector

Presented by

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Well Aware – CIGNA's Disease Management Program

6 Conditions under management targeting 660 K members (10% of the eligible covered membership)

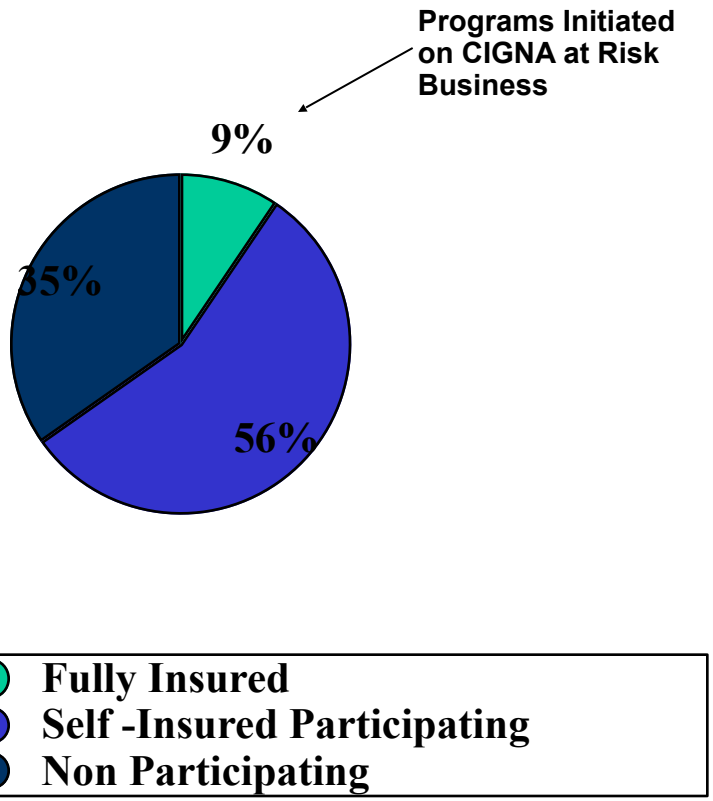
Total Health Programs

- Congestive Heart Failure
- Coronary Artery Disease
- Chronic Obstructive Pulmonary Disease
- Diabetes

Condition Specific Programs

- Asthma
- Low Back Pain

CIGNA Participating Membership



Well Aware – CIGNA's Disease Management Program

Basic premise of DM: Intensive patient participation in self-care improves outcomes and lowers cost of care

- Focus of DM Program:
  - Rapid Identification and engagement of all patients with chronic conditions
  - Repetitive, structured interactions with patients to support behavior change
  - Medication compliance
  - Understanding of consequences of disease and benefits of treatment plans
  - Support of interactions with treating physicians through visit planning
- Case management of severe cases (discharge planning, home health, transportation, access to DME, etc.)
- Reporting of Results
  - Quality indicators
  - Utilization of services
  - Patient (and physician) satisfaction
  - Financial impact (direct and indirect)

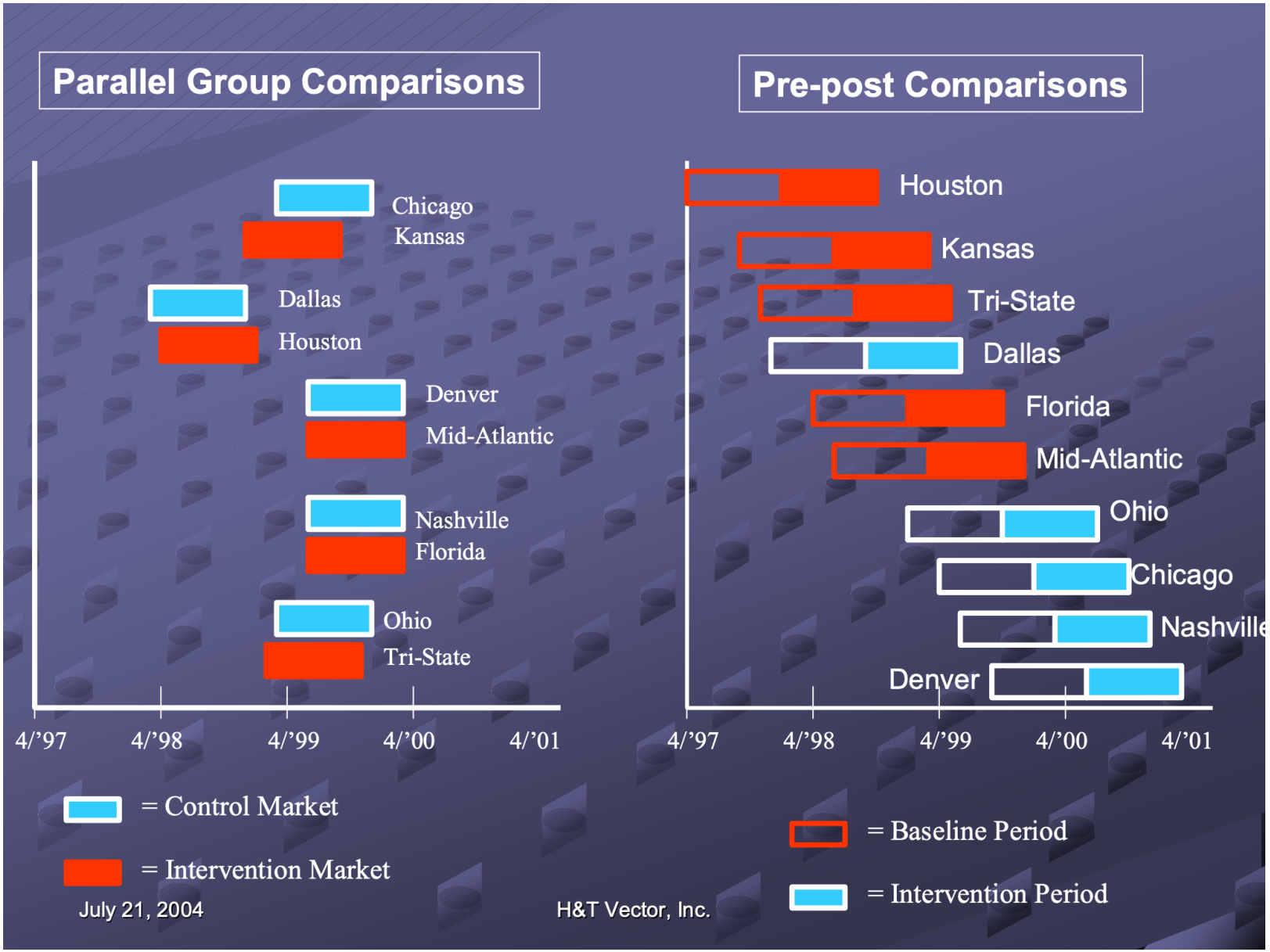
Overall Program Results – Example*

National Diabetes Disease Management Program

- Over 43,000 members with diabetes nationwide (10 major markets) included in study of disease management programs first year of operation (staggered implementation schedule between 1998-2001)
- Method:
  - 10 Pre-post comparisons
  - 5 concurrent DM market vs. no-DM market parallel group comparisons
    - Comparable no-DM and DM cohorts at baseline
  - Intention-to-treat and full program participants only

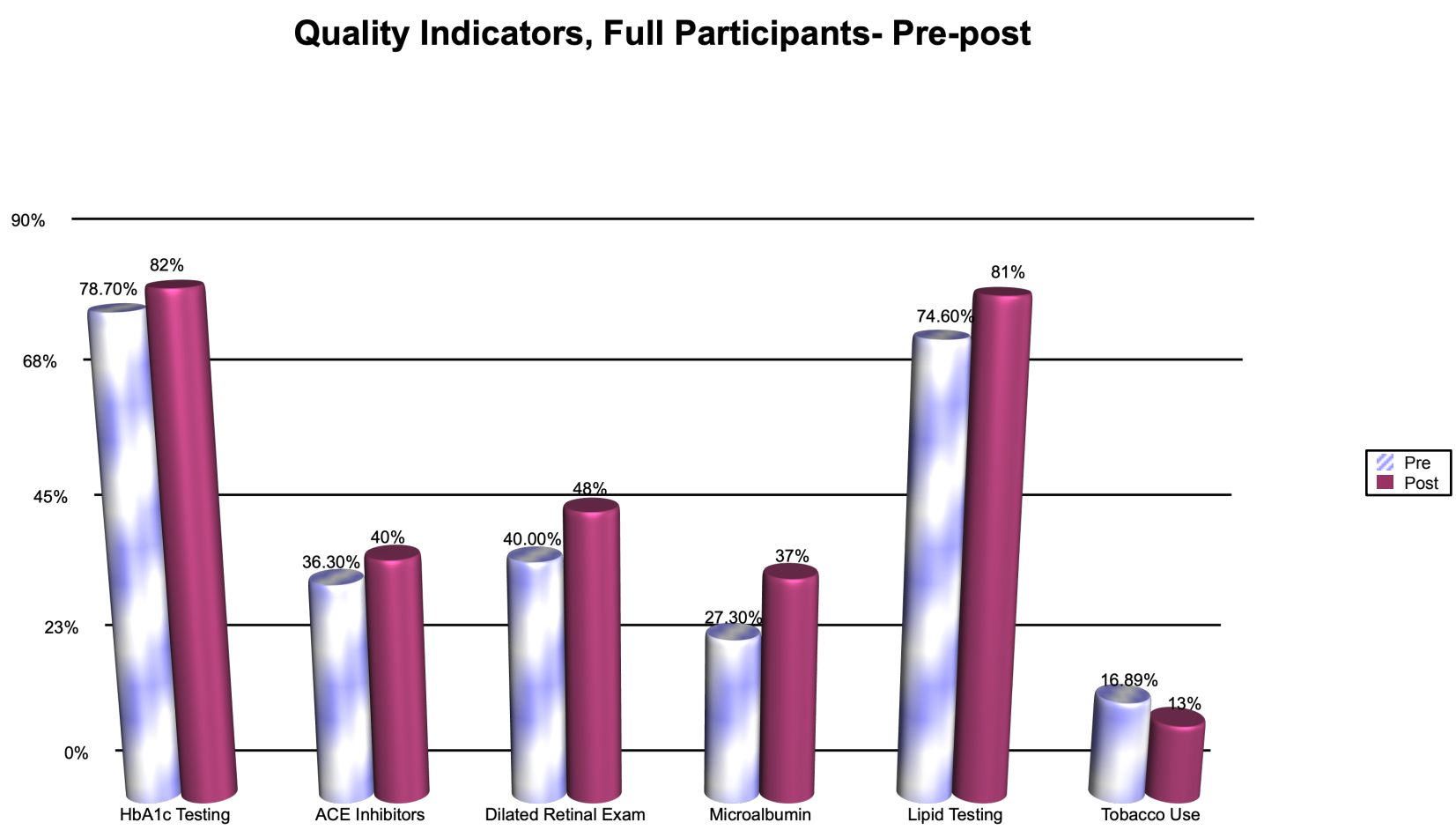
*Victor. G. Villagra, and Tamim. Ahmed: "Effectiveness Of A Disease Management Program For Patients With Diabetes". *Health Affairs* 2004 23 : 255-266

Study Schema



Results:

Improved clinical quality in all six key indicators of care for diabetes; four of six at a highly statistically significant level



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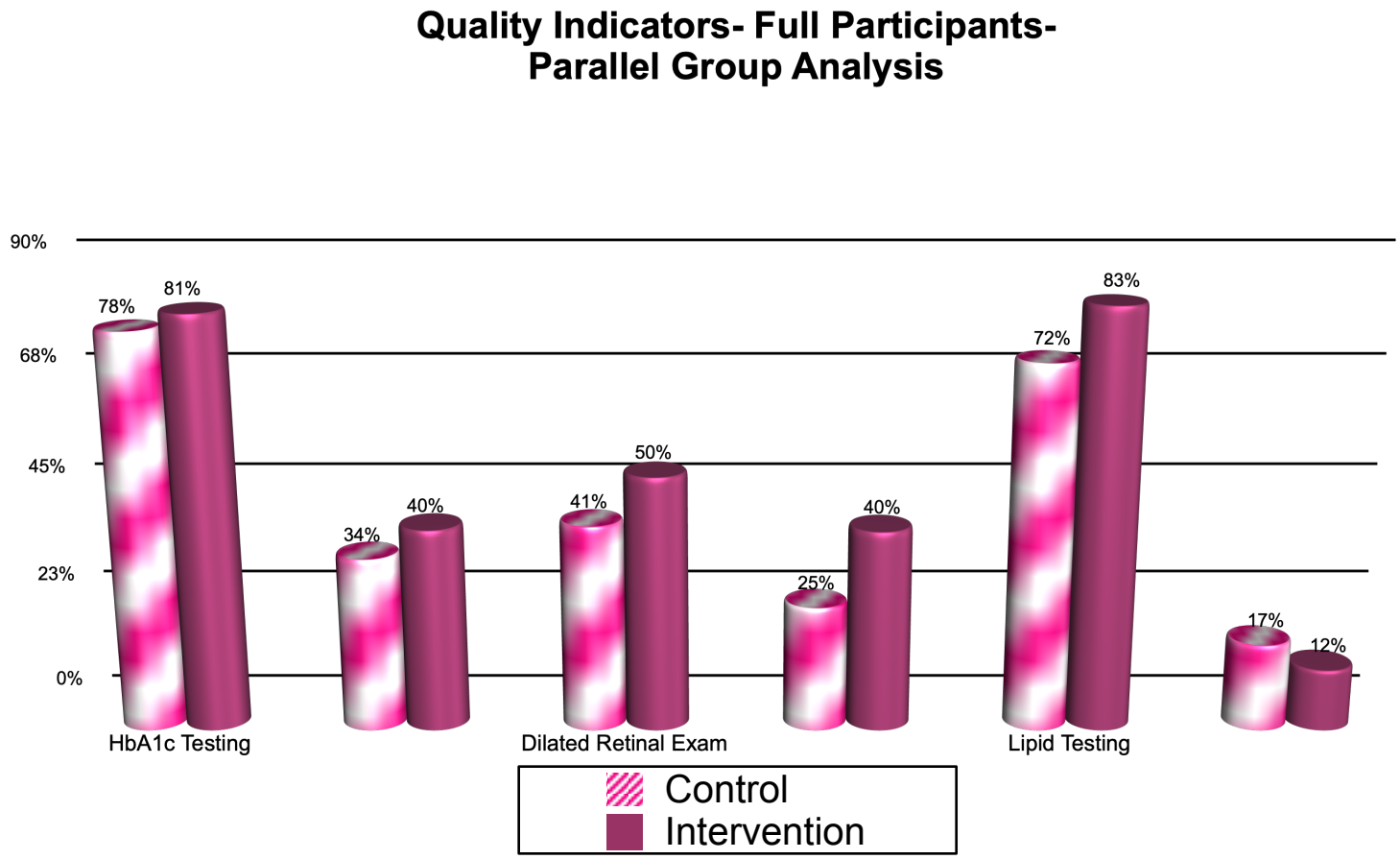

Results:

- Costs reductions primarily result from lower hospitalization rates, OP services and use of emergency room services

Adjusted Mean Utilization, “Full Participants” and “All Participants (Intention-to-treat)”. Pre-post Analysis

	Full Participants					Intention to Treat				
N of Members	27,380	27,876				32,267	43,492			
Utilization(b)										
Beddays	1,119	878	-241	-22.0	<.0001	1133	955	(178)	-15.7%	<.0001
ALOS(days)	5.53	5.55	0.02	0.4	NS	5.5	5.6	0.1	-1.0%	<.0194
Admissions	202	158	-44	-21.9	<.0001	206	172	(34)	-16.5%	<.0001
Office Visits	6.7	6.47	-0.23	-3.4	<.0001	6.75	6.63	(0.1)	-1.8%	<.0023
Emergency Room	255.2	257.5	2.3	0.9	NS	262	286	24	9.2%	<.0005

b. Bed days, admissions, and emergency room (ER) visits represent utilization per 1,000 Diabetic members per month. Office visits represent the average per diabetic member per year.

Results:

- Reduced average costs by five to eight percent
- Net Result was a 1% net reduction in medical trend for the Plan

Adjusted Mean Cost “Full Participants” and “All Participants”. (Intention-to-treat) Pre-post Analysis

	Full Participants					Intention-to-Treat				
	Baseline	Intervention	Difference	%	p	Baseline	Intervention	Difference	%	P Value
N of Members	27,380	27,876				32,267	43,492			
Costs										
Overall Cost (PDMPM) (a)	$485	$446	($40)	-8.1	<.0001	$490	$464	($26)	-5.3%	<.0037
In-Patient	$156	$126	($30)	-19.0	<.0001	$156	$137	($19)	-12.3%	<.0018
Out-Patient	$80	$76	($5)	-5.8	<.0405	$82	$77	($5)	-5.6%	<.0392
Pharmacy	$111	$114	$3	3.1	<.0122	$112	$112	$0	0.0%	NS
Professional	$121	$106	($15)	-12.6	0.0001	$122	$111	($12)	-9.4%	<.0001
Other	$39	$44	$5	13.6	NS	$39	$46	$6	16.3%	<.0138

a. Overall cost is less than the sum of components because the pharmacy regression model included fewer member-months (because of carve-outs) than other cost components.

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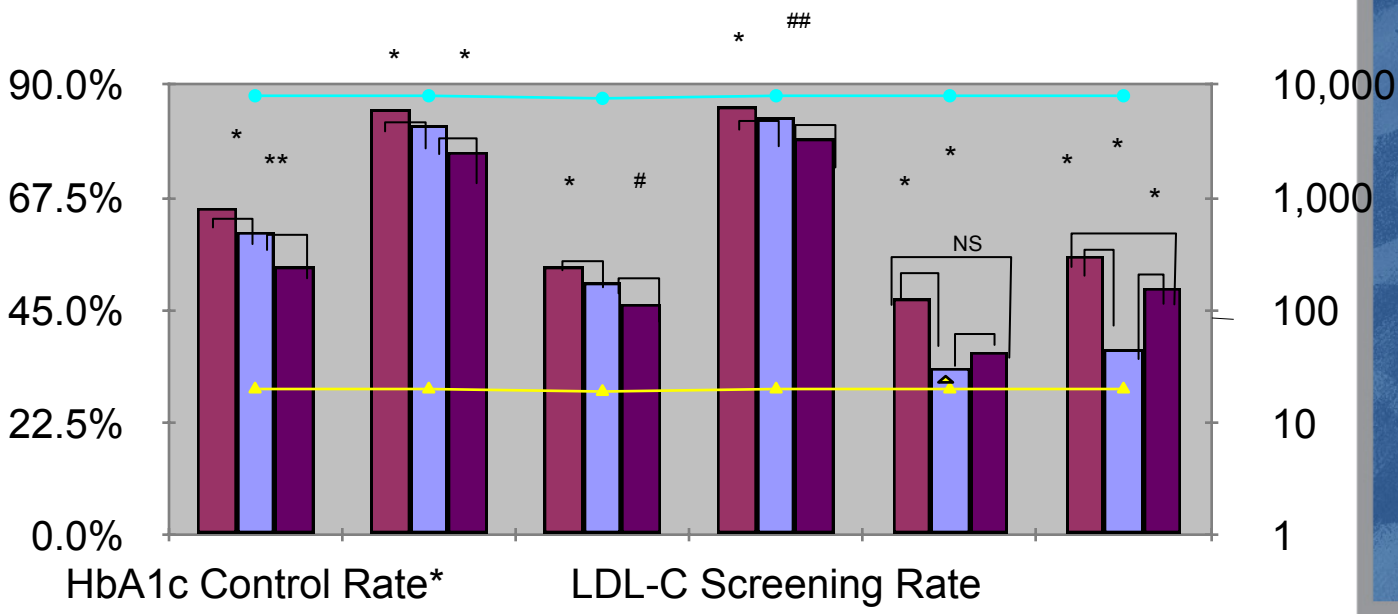
HEDIS Results by Participation in DM Program*

STUDY OBJECTIVES: *To answer the questions:*

1. Does participation in a Diabetes Disease Management Program(DDMP) result in better quality of care than non-participation?
2. Does duration of participation in a DDMP correlate with degree of quality improvement?
3. Does participation in the DDMP beyond 6 months result in incremental quality improvements

*** Espinet L, Ahmed, T, Osmick MJ, Villagra, VG. A Cohort Study of the Impact of a National Disease Management Program on HEDIS Diabetes Outcomes. Disease Management *In Press* .**

RESULTS



* p<.001

**p<.002

# p<.04

p<.02

NS= Not significant

Lessons Learned

- Results are driven by a strong initial communication and implementation of the program, including:
  - Employee awareness
  - Access to valid telephone numbers
  - Enhanced use of supporting resources (case management, etc.)
  - Provider awareness helps but difficult to engage
  - Quality metrics improve consistently
  - Cost reductions driven predominantly by lower hospitalization rates

Other Lessons Learned

- Members and providers are more receptive to disease management than to utilization management.
- DM Model can be expanded to PPO and fee-for-service sectors with minor modifications
- Access to electronic data is indispensable for program scalability and cost-effectiveness
- Traditional out-patient delivery system and DM programs are not well coordinated but pilot programs to address barriers are under way

Future Direction

- Increasing the number of individuals under management
- Greater attention to identification and management of depression as co-morbid condition.
- Expanding and enhancing wellness programs to healthy members as part of primary and secondary prevention program with emphasis on
- Development of quarterly operational reporting to track interim performance and forecast results
- Adapt DM technologies to serve Medicare and Medicaid beneficiaries
- Emphasis on addressing cultural, language and other barriers to DM