Better Payment Policies for Quality of Care:

Fostering the Business Case for Quality Phase I – Medicaid Demonstrations

Final Report – Site Summaries
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UNC
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Project Background

Metastar, La Crosse County's quality enhancing initiative (QEI) was implemented through the *Business Case for Quality* (BCQ), a multi-site demonstration project designed by the Center for Health Care Strategies (CHCS) to test the existence of a business case for quality for Medicaid managed care organizations. Ten Medicaid managed care entities implemented pilot interventions that addressed a range of clinical conditions and intervention strategies. The interventions, launched in April 2004, were evaluated by a research team at the University of North Carolina at Chapel Hill. BCQ was funded by the Robert Wood Johnson Foundation (RWJF) and The Commonwealth Fund (CMWF).

Wisconsin
Metastar, La Crosse County

The Wisconsin Medicaid program is administered by the Wisconsin Department of Health and Family Services (DHFS). The Department's Family Care program, which partially integrates Medicaid services with 1915c waiver services, is a managed long-term care program for frail elders (74%), adults with physical disabilities (12.7%), and developmental disabilities (12.7%). The program is operated by five Wisconsin county agencies, with total enrollment of approximately 8,000. Family Care is an entitlement for all who are both functionally eligible and financially eligible for Medicaid. Family Care case management is conducted by interdisciplinary teams consisting of, at a minimum, the consumer, a social worker, and a nurse. Interdisciplinary team staffs are responsible for following professional best practices, including disease management and prevention and wellness protocols.

The Family Care model partially integrates Medicaid state plan services with the full array of 1915c waiver services. Benefits include nursing home, home health, therapies, outpatient mental health, durable medical equipment, personal care and all 1915c waiver services. The program does not include acute or primary care or pharmacy but contractually requires that the interdisciplinary teams coordinate these services.

MetaStar is the external quality review organization for the Family Care CMO in La Crosse County, where the QEI was implemented. The La Crosse CMO has total enrollment of 1,477 members and 90% are dually eligible for Medicaid and Medicare.

Reimbursement Model

DHFS contracts with certified care management organizations (CMOs) using a risk-based contract under which the organizations are paid a capitated payment per member per month. Since capitation rates are regularly recalculated based on risk adjustment, as member utilization decreases, capitation rates drop. In addition, resources for administrative overhead also decline, as a 7-8% administrative cost is factored into the capitation rate. Accordingly, the state is likely to benefit from improved quality of care, but the CMOs administering the programs will not benefit under the current reimbursement structure. In addition, given the high percentage of dual eligible, Medicare will benefit most from decreased utilization.

Quality Enhancing Intervention

The goal of the QEI is to improve care for La Crosse CMO consumers with diabetes by improving assessment, education, follow-up, coordination of care, and services for these individuals. The primary mechanisms for improving case

management and services was through the implementation of case management practice guidelines based on the American Diabetes Association best practice guidelines. The QEI consisted of the implementation of tools such as clinical flow sheets, training on the use of the guideline, patient education on diabetes conducted by the interdisciplinary team, and the implementation of a registry. Both the flow sheet and the registry track RN focus visits, primary care provider visits, exams and lab results, self- management goals, medications, immunizations, and overall progress of the consumer. The registry also generates flow sheets that can be given to the consumer to take to their primary care provider appointment as additional information about the consumer's progress.

Target Population

Diabetes is one of the most commonly occurring chronic conditions in Family Care. Approximately 20% of La Crosse CMO members have a diagnosis of diabetes. Notably, members with diabetes have significantly higher utilization rates than members without diabetes, ranging from 29.7% higher for ER use to 45.8% higher for home health services. In the La Crosse CMO in particular, these differences were even more pronounced prior to the QEI implementation. For example, the rate of difference of nursing home admissions was 66.9% higher for diabetics in La Crosse versus only 37.0% higher for diabetics in the Family Care population as a whole. Because of its significantly higher rates of service utilization and mortality for members with diabetes, the La Crosse CMO provides an excellent context for the implementation and study of preventive and remedial interventions for people with diabetes.

Using administrative data, the La Crosse County CMO selected 251 CMO consumers with diabetes, mostly persons who were dually eligible for Medicare and Medicaid. Persons included were those who have no cognitive impairment and reside in a community setting that has no regulations governing the monitoring of medications and diet for diabetes (i.e., does not live in a nursing home or community-based residential facility). Members chosen lived in La Crosse County. A similar group of 292 consumers from two other non-contiguous counties and CMOs were chosen for the control group.

Baseline Claims Findings

The age range of the 251 members in baseline was 29 to 100 years, with a mean age of 64 years. The control group was slightly older, with a mean age of 71 years, and a range from 19 to 98 years. Metastar chose to add new individuals each year. Consequently, in year one there were 417 persons in the intervention and 424 persons in the controls, with 375 average member months in the cases, and 364 in the control group. In year two there were 425 cases and 425 controls with 382 average member months for the cases and 371 for the controls. The mean age for the controls remained at 64 years for the duration, while for the controls were 70 years of age for years one and two. There were no

patients in either the cases or controls with unusually high claims costs, so no outliers were removed from the analysis. (**Appendix 10**)

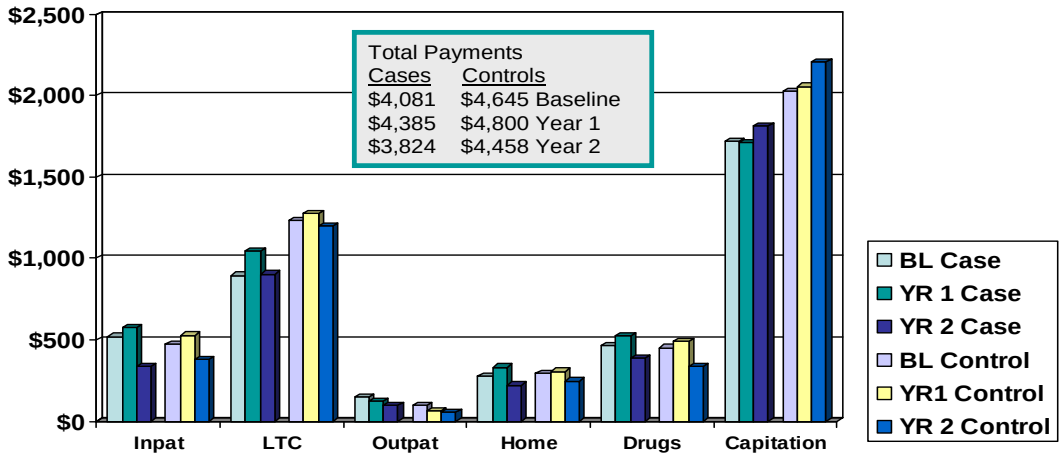
During the baseline year total PMPM payments for cases were $4,081, with the largest proportion, 42% or $1,720 for capitation. This was followed by $882 PMPM payment for long term care, with an admission rate of 171.1 admissions per 1000 persons per year. Payments for hospital inpatient care were $511, with admission and day rates of 279.7 admissions and 1,344.0 days per 1000 persons per year. Payments for outpatient prescription drugs were $465 PMPM, with a prescription rate of 52.8 prescriptions per person per year. (**Table 10.1, Figure 10.1**)

Table 10.1: Wisconsin-MS Utilization Measures

Utilization	Baseline Case N= 251	Year 1 Case N=417	Baseline in Year 1 Case N=250	Year 2 Case N=425	Baseline in Year 2 Case N=230	Baseline Control N=292	Year 1 Control N=424	Baseline in Year 1 Control N=261	Year 2 Control N=425	Baseline in Year 2 Control N= 222
Admissions/ 1000	279.7	359.6	346.8	196.3	171.0	332.2	345.8	345.8	226.4	205.3
Days/1000	1,344.0	1,419.7	1,307.8	822.0	545.5	1,711.7	1,732.0	1,704.3	1,083.3	752.8
Office visits per person	3.5	3.6	3.4	3.4	3.2	2.4	2.4	2.0	1.9	1.4
ER visits per person	1.0	1.1	1.0	0.7	0.7	0.9	1.2	1.07	0.6	0.4
Home visits per person	2.5	10.1	10.7	5.6	6.6	5.8	5.2	6.6	3.1	4.3
Prescriptions per person	52.8	55.0	DNA	45.2	DNA	49.9	56.2	DNA	39.5	DNA
SNF Admissions/ 1000	171.1	258.4	246.5	248.7	258.9	205.8	219.6	197.6	204.8	210.2

Total payments for the controls during the baseline year were $4,645 PMPM, 13.8% higher than payments for the cases. **Figure 10.1** compares the component payments between the cases and controls. Long term care and capitation payments were higher for the controls than the cases. Long term care payments for controls were $1,234, or 40% higher than the cases and capitation payments were 17.7% higher. For other categories of care, including inpatient and outpatient hospital care, home care and prescriptions drugs, the cases and controls are reasonably comparable.

Figure 10.1: Wisconsin - MS PMPM Payments by Category – all patients



During year one, PMPM payments increased for both the cases and the controls. (**Figure 10.3**) The payments for cases increased 7.4% while payments for the controls increased 3.3%. However, payments decreased for both in year two, 13.1% for the cases and 7.1% for controls. Over the three year period, the overall result was a decline for both, 6.3% for cases and 4.0% for controls. The most significant change in utilization over the three years was in the use of inpatient hospital services. Days per 1000 persons decreased 38.8% for the cases and 36.7% for the controls. Long term care admissions per 1000 increased 45.4% for the cases, and remained stable for the controls. The rate of prescription drugs declined for both groups, from 52.8 to 45.2 prescriptions per person for the cases, and from 49.9 to 39.5 prescriptions for the controls. (**Table 10.1**) The decline in the prescription drug rate in year three is due, at least in part, to the introduction of Medicare Part D. With the introduction of Medicare Part D in January, 2006, WI-MS was no longer responsible for some of the drugs in this population. We have no way to measure what portion of the drug utilization rate and corresponding PMPM payment this would be. With this caveat, our analysis shows that prescription drug PMPM payments decreased 17.0% for the cases and 25.7% for the controls.

Figure 10.2: Wisconsin- MS PMPM Payments by Category
Cohort present all three years
(excluding drugs)

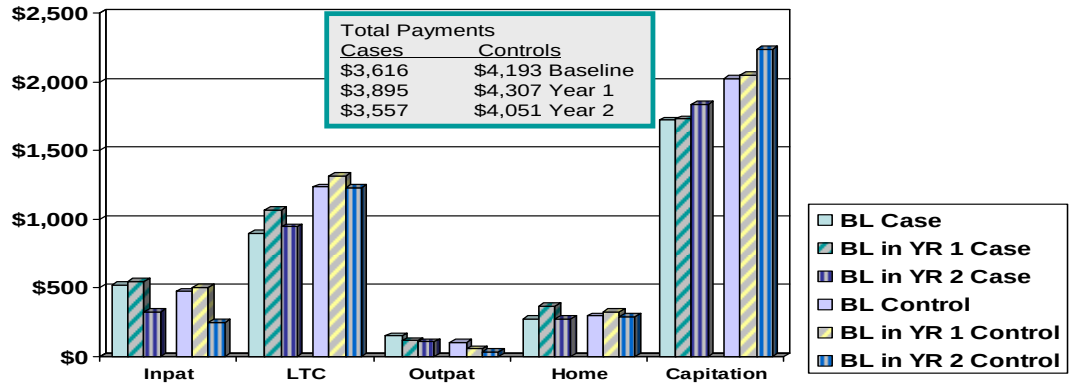
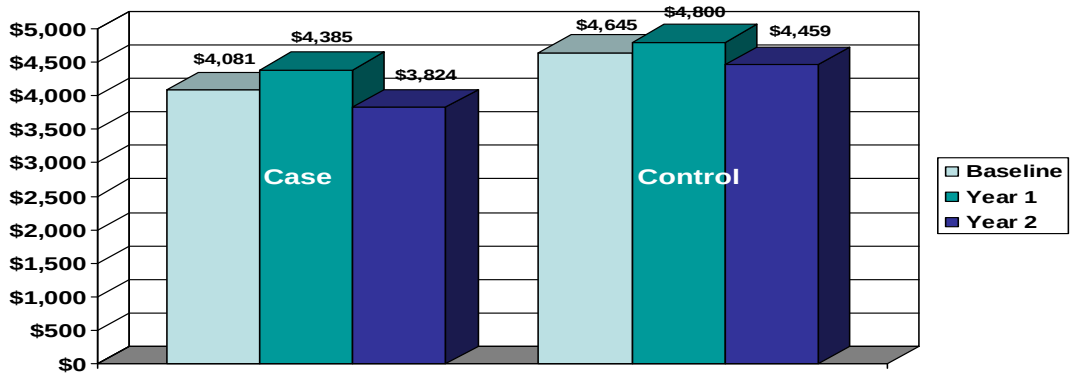


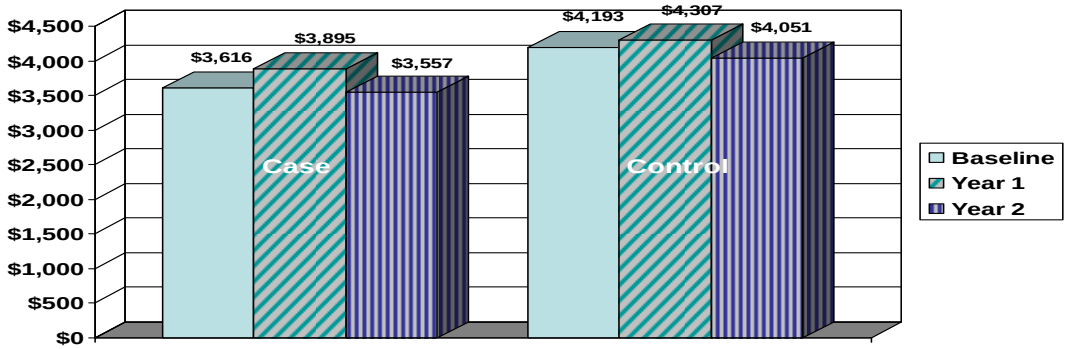
Figure 10.3: Wisconsin - MS
PMPM Payment Totals – all patients



Cohort Analysis

Due to the addition of new cases and controls through years one and two, and the attrition of baseline members, a secondary analysis was performed on the members in year two who were present all three years. Due to the introduction of Medicare Part D, and the dissimilar prescription drug data in the three years, we excluded prescription drugs from this analysis. Over the three years, total PMPM payments decreased1.6% for cases and 3.4% for controls. (**Figures 10.3, 10.4**)

Figure 10.4: Wisconsin- MS, PMPM Payment Totals
Cohort present all 3 years
(excluding drugs)



Investment and Operating Expense

During the baseline year Metastar spent $15,091 for investment and start up costs, mostly associated with providing technical assistance to La Crosse County CMO in designing their interventions. During years one and two, the La Crosse County CMO's operating costs totaled $111,600 and $131,506 respectively, expenses primarily for nurse case manager and quality manager time. (**Table 10.2**)

Table 10.2: Wisconsin - MS
Operating Costs

Costs	Baseline	Year 1	Year 2
Personnel	$6,052	$105,148	$125,801
Office	$7,921	$3,452	$1,405
Equipment	$0	$0	$0
Other direct	$0	$0	$0
Indirect	$1,118	$3,000	$4,300
Total	$15,091	$111,600	$131,506

Return on Investment

Start up costs and ongoing operating expense totaled $247,397 over the three years, on a discounted basis. The return on investment was calculated on a net basis in which the savings/losses for the cases and controls are combined for each year, and accumulated for the three years. While there were claim savings in year two for both cases and controls, these were more than offset by the claim cost increases in year one. Consequently the return on investment was negative (-1.37). The net present value was -$586,795. (**Table 10.3**)

Table 10.3: Wisconsin-MS Return on Investment

Incremental Case v. Control

	Baseline	Year 1	Year 2	Total
Investment in QEI				
Investment/Operational Costs	$15,091	$111,600	$131,506	
Discounted Costs	$15,091	$108,349	$123,957	$247,397
Savings/Increases from QEI				
Utilization Savings		($666,810)	$326,748	
Discounted Savings		($647,388)	$307,991	($339,397)
ROI Metrics				
Benefit-Cost Ratio				(1.37)
Net Present Value				($586,795) negative

APPENDIX 10

WI-Metastar *(Confirmed Medicare and Medicaid paid only)*											
QEI- Diabetes	**QEI Start Date: 09/01/2004**								**Data Contact-Nathan Williams, Nachman Sharom**		
		Age Statistics				**Members in Claims**	**Average Member Months**	**Total Payments PMPM**	**Individual Average PMPM ***	
Utilization and Membership		**min**	**max**	**mean**	**median**				**LOW**	**HIGH**
Baseline :06/03-05/04	Case N	29	100	63.7	64	251	239.58	$4,081	$780	$12,491
	Control N	19	98	71.1	74	292	276.92	$4,645	$286	$21,469
Year 1:06/04-05/05	Case N	25	101	64.1	64	417	375.42	$4,385	$93	$16,780
	Control N	20	99	70.4	74	424	364.33	$4,800	$58	$22,183
Year 2:06/05-05/06	Case N	27	102	64.4	64	425	382.00	$3,824	$69	$12,522
	Control N	21	100	70.1	73	425	371.08	$4,459	$130	$25,846
Baseline in Year 1*	Case N	-	-	-	-	250	239.33	$3895*	$361	$16,780
	Control N	-	-	-	-	261	242.92	$4307*	$239	$22,183
Baseline in Year 2*	Case N	-	-	-	-	230	216.33	$3556*	$69	$12,522
	Control N	-	-	-	-	221	204.58	$4051*	$225	$13,533

	Case						**Control**					
Utilization Measures by Category	**Baseline**	**Year 1**	**Year 2**	**Baseline in Year 1**	**Baseline in Year 2**		**Baseline**	**Year 1**	**Year 2**	**Baseline in Year 1**	**Baseline in Year 2**	
Admissions/1000	279.7	359.6	196.3	346.8	171.0		332.2	345.8	226.4	345.8	205.3	
Days/1000	1,344.0	1,419.7	822.0	1307.8	545.5		1711.7	1732.0	1,083.3	1704.3	752.8	
Office visits/person	3.5	3.6	3.4	3.4	3.2		2.4	2.4	1.9	2.0	1.4	
ER visits/person	1.0	1.1	0.7	1.0	0.7		0.9	1.2	0.6	1.07	0.4	
Home visits/person	2.5	10.1	5.6	10.7	6.6		5.8	5.2	3.1	6.6	4.3	
Prescriptions/person	52.8	55.0	45.2	DNA	DNA		49.9	56.2	39.5	DNA	DNA	
SNF admissions/1000	171.1	258.4	248.7	246.5	258.9		205.8	219.6	204.8	197.6	210.2	

	CASE											
PMPM Payment by Category	**Baseline**	**%Tot**	**Year 1**	**%Tot**	**Year 2**	**%Tot**	**Baseline in Year 1**	**%Tot**	**Baseline in Year 2**	**%Tot**		
Inpatient	510.75	12.5	573.89	13.09	335.48	8.77	543.94	13.97	324.73	9.13		
LTC	882.18	21.6	1044.33	23.82	903.97	23.64	1066.38	27.38	941.49	26.47		
Outpatient	144.25	3.5	124.42	2.84	94.42	2.47	113.38	2.91	105.53	2.97		
Office	57.31	1.4	59.88	1.37	59.08	1.54	61.31	1.57	64.04	1.8		
ER	28.48	0.7	14.96	0.34	9.52	0.25	14.66	0.38	9.73	0.27		
Home	269.37	6.6	329.89	7.52	222.1	5.81	364.62	9.36	273.32	7.68		
Pharmacy	465.37	11.4	524.54	11.96	385.79	10.09	DNA	0.0	DNA	0.0		
Other	3.65	0.09	3.12	0.07	0.65	0.02	2.22	0.06	0.56	0.02		
Capitation	1720.13	42.1	1709.89	38.99	1813.25	47.41	1728.33	44.37	1837.14	51.66		
Total	$4,081.49	100%	$4,384.92	100%	$3,824.26	100%	$3894.84*	100%	$3556.54*	100%		

	CONTROL											
PMPM Payment by Category	**Baseline**	**%Tot**	**Year 1**	**%Tot**	**Year 2**	**%Tot**	**Baseline in Year 1**	**%Tot**	**Baseline in Year 2**	**%Tot**		
Inpatient	472.55	10.17	527.84	11	376.07	8.4	505.96	11.8	243.34	6.01		
LTC	1234.15	26.57	1277.63	26.62	1200.55	26.9	1315.37	30.5	1229.84	30.36		
Outpatient	97.49	2.1	62.31	1.3	51.47	1.2	52.5	1.2	31.22	0.77		
Office	47.49	1.02	64.84	1.35	31.77	0.7	39.99	0.9	25.06	0.61		
ER	21.53	0.46	11.31	0.24	9.32	0.2	10.19	0.2	4.63	0.11		
Home	292.52	6.3	304.61	6.35	244.81	5.5	323.39	7.5	286.7	7.08		
Pharmacy	451.92	9.73	492.18	10.25	335.77	7.5	DNA	0.0	DNA	0.0		
Other	1.23	0.03	1.85	0.04	1.81	0.1	1.61	0.0	1.89	0.05		
Capitation	2025.83	43.62	2057.39	42.86	2207.19	49.5	2058.02	47.8	2228.52	55.01		
Total	$4,644.71	100%	$4,799.96	100%	$4,458.76	100%	$4307.03*	100%	$4051.20*	100%		
* Excludes pharmacy												