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
THE CECIL G. SHEPS CENTER
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Project Background

Community Living Alliance'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

Community Living Alliance

The Medicaid program in the state of Wisconsin is administered by the Wisconsin Department of Health and Family Services (DHFS). Community Living Alliance (CLA) is a nonprofit managed care organization in Wisconsin that provides coordinated community-based, social and health care services to low-income people with disabilities under the Medicaid and Medicare programs. The organization serves 275 disabled individuals 64 years of age and younger. The organization was created in 1994 by the state of Wisconsin as a community based, cost-effective alternative to long-term care with an emphasis on maintaining independent living.

Reimbursement Model

Since 1999, CLA has operated under a fully-capitated, dual Medicaid and Medicare (1115/222) waiver that combines Medicaid and Medicare funds into one funding stream. As such, CLA provides all Medicaid covered benefits, all Medicare covered benefits, plus waiver benefits such as home modifications, meals on wheels, and social transportation. Pharmacy benefits are included so that CLA is also able to oversee medication management of this disabled population.

Wisconsin DHFS reviews capitation rates every six months. As a result, if utilization and associated medical expenses decrease, CLA is at risk of having its capitation rate reduced. This has two negative effects on the incentives at the plan level. First, if capitation rates are reduced, the cash flow to the plan for the coming six months will decline. Second, because the plan's administrative overhead is calculated as a percentage of the capitation rate, resources to fund this overhead, which includes administrative salaries, will also be reduced.

Quality Enhancing Initiative

During a typical year, an average 50 CLA members develop skin ulcers that require nursing, medical or surgical intervention, costing over $600,000. In response, CLA has launched an evidence-based program of risk identification, prevention, early detection and effective management for skin ulcers and skin wounds in all at risk members in the community-based CLA Program. The purpose of the QEI is to identify members that are at risk for developing skin ulcers and to manage their care in a way that decreases inpatient care and associated costs. The QEI is comprised of the following steps:

Step 1 Development of risk factor list/tool to identify members at risk for developing skin ulcers. The risk factor tool is applied to each

member on admission to the program and quarterly thereafter as well as at any time a significant change in their health status occurs.

Step 2 Implement the components of the skin ulcer intervention protocol:

Level 1. Identification of all risk factors. This is done using input of the providers as well as patient.

Level 2. Identification of specific members. A score is developed for each member to characterize their level of risk for skin ulcers.

Level 3. Prevention of development or of progression of skin ulcer. The two key components at this level are caregiver knowledge and member education. Caregiver knowledge utilizes a specific didactic and experiential curriculum with pre-testing, post-testing and procedure demonstration. Information materials include written information, as well as video discussions, demonstrations and instruction.

Level 4. Best practices of skin ulcer management. A 'Skin Wound Action Team' (SWAT) provides skin care to members at greatest risk.

Level 5. Re-evaluation of risk. Once a member has experienced a skin ulcer, that member is considered at high risk for future ulcers and is targeted accordingly.

Level 6. Re-education. Following resolution of the skin ulcer, re-education is conducted for the member and for the caregivers.

Target Population

Eligibility policies limit enrollment in CLA to those 64 years of age and younger who have physical disabilities and complex heath needs. The study population of 211 was selected from their enrollment based on diagnoses of spinal cord injury, multiple sclerosis, morbid obesity, diabetes mellitus or peripheral vascular disease. Three patients in the intervention experienced claims expense in excess of $250,000 during the year preceding the intervention. Since the medical problems for these patients were consistent with the diagnoses for which they were included in the QEI, we did not consider them to be outliers. Consequently, no high-cost members have been excluded form the analysis.

Baseline Claims Findings

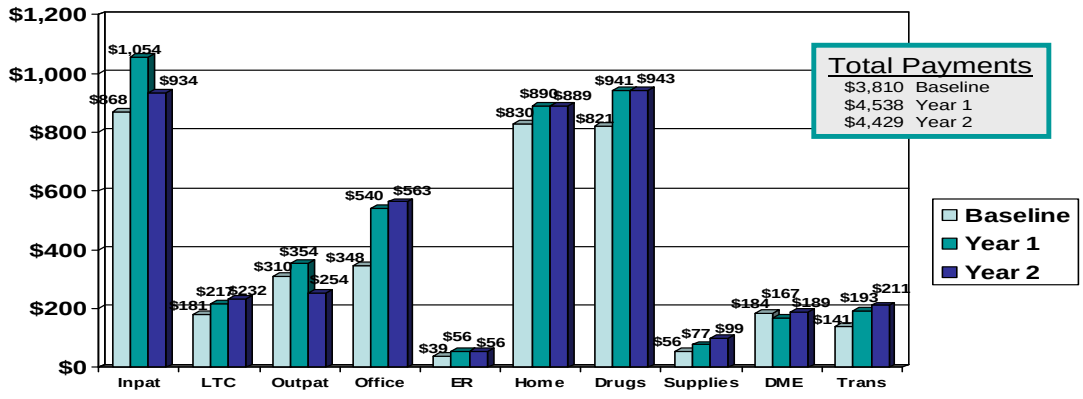
The 211 participants identified in the baseline year ranged in age from 19 to 68, with a mean age of 49 years. There was modest attrition in members during the year, resulting in 204 average member months. Payments for all services during the baseline year averaged $3,810 PMPM. (**Figure 9.1**) The

three largest components were for hospital inpatient care ($868), home care ($830) and prescription drugs ($821). Hospital utilization rates were high, reflecting 790 admissions per 1000 persons, 6,223 days per 1000 persons, for a 7.9 day average length of stay. (**Table 9.1**) Home visits averaged 9.5 per person and prescription drugs averaged 175 per person or the equivalent of 14-15 maintenance drugs per person. This population averaged 10.6 office visits per person, for a payment of $348 PMPM. Other significant expenditures were for hospital outpatient care ($310), for DME ($184) and for transportation services ($141). (**Appendix 9**)

Table 9.1: Wisconsin-CLA Utilization Measures

Utilization	Baseline Case N=211	Year 1 N=268	Baseline in Year 1 N= 208	Year 2 N= 276	Baseline in Year 2 N=184
Admissions/1000	790.2	1,121.6	1,065.9	1,025.6	928.3
Days/1000	6,223.3	7,414.4	7,571.3	6,687.2	6,076.0
Office visits per person	10.6	13.1	11.9	11.9	10.7
ER visits per person	1.5	2.1	2.0	2.0	1.8
Home visits per person	9.5	14.8	13.3	17.7	16.3
Prescriptions per person	175.1	198.3	196.1	212.2	213.7

Figure 9.1: Wisconsin-CLA PMPM Payments by Category



Years One and Two Claims Findings

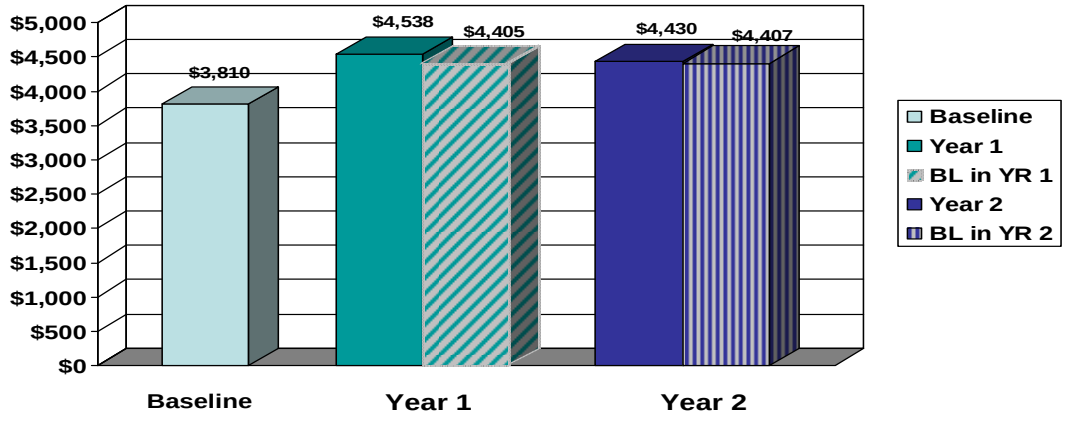
During year one WI-CLA added eligible members resulting in 268 individuals participating at some time during the year. The average member months were 222. The participants ranged in age from 20 to 69 years, with a mean age of 51. In year two there were 276 members eligible, with a similar age range of 21 to 70 and mean age of 51. In year one the total PMPM payments increased 19% to $4,538. Payments increased for all categories of service with the exception of DME. The largest increases were for hospital inpatient care ($868 to $1,054), office services ($348 to $540) and pharmacy services ($821 to $941). The hospital admission rate increased dramatically, to 1,121 admissions per 1000, though a more modest increase in days, to 7,414, days per 1000. Office visits increases from 10.6 to 13.1 visits. The average number of prescriptions also increased, from 175.1 to 198.3. While payments for home visits increased moderately to $890, the home visit rate jumped from 9.5 to 14.8. (**Appendix 9, Table 9.1, Figure 9.1**)

In year two the total PMPM payments declined a moderate 2.4% to $4,430, resulting in an overall 16.3% increase for the two years. In year two the most significant changes in payments were for hospital inpatient and outpatient care. Inpatient payments declined from $1,054 to $934, though still above the $868 payment in baseline. The admission rate was down slightly to 1,025.6 admissions per 1000 persons, and the days declined to 6,687.2 days per 1000. Payments for hospital outpatient care declined from $351 to $254. However, payments for LTC, office visits, supplies, DME, prescription drugs and transportation increased. (**Figure 9.1, Table 9.1**)

Cohort Analysis

Given the addition of new members in years one and two, a secondary analysis was performed to examine the impact of the QEI on the original cohort. There were 184 members who remained in the cohort for the full three years. Their total PMPM payments in year two were $4,407. This represents a 15.7% increase from baseline, compared to the 16.3% increase when the entire year two population was included. Consequently, the addition of more participants did not alter the results of the analysis. (**Figure 9.2**)

Figure 9.2: Wisconsin-CLA PMPM Payment Totals



Investment and Operating Costs

During the baseline year, WI-CLA spent $35,586 on upfront investment to develop the QEI. Most of this expense was to support the Medical Director, the Quality Director and a data analyst. During year one of the QEI, operating expense totaled $55,416 followed by $49,103 in year two. Expenses included support for a quality manager and other clinical personnel. (**Table 9.2**)

Table 9.2: Wisconsin-CLA Operating Costs

Costs	Baseline	Year 1	Year 2
Personnel	$32,193	$48,815	$39,537
Office	3,343	3,505	6,231
Equipment	0	407	(50)
Other direct	50	50	2,459
Indirect	0	2,639	926
Total	$35,586	$55,416	$49,103

Return on Investment

Over the three years the start up and operating costs totaled $135,673 on a discounted basis. Since claim costs increased over the three years, there were no savings to offset the operating expense. The net present value was -$3,737,854 for a benefit cost ratio of -26.48. (**Table 9.3**)

Table 9.3: Wisconsin-CLA Return on Investment

	Baseline	Year 1	Year 2	Total
Investment in QEI				
Investment/Operational Costs	35,586	55,417	49,104	
Discounted Costs	35,586	53,803	46,285	135,673
Savings/Increases from QEI				
Utilization Savings		(1,939,365)	(1,813,398)	
Discounted Savings		(1,882,879)	(1,709,302)	(3,592,181)
ROI Metrics				
Benefit-Cost Ratio				-26.48
Net Present Value				(3,727,854) negative

APPENDIX 9

WI-Community Living Alliance										
QEI - Skin Ulcers	QEI Start Date: 10/01/2004						Data Contact- Linda Erdmann, Matt Bunting			
Utilization and Membership	Age Statistics				Members in Claims	Average Member Months	Total Payments PMPM	Individual Average PMPM	
	Min	Max	Mean	Median				LOW	HIGH
Baseline period: 09/03-08/04	19	68	49.2	51	211	204	$3,810.21	$0.00	$36,763
Year 1: 9/04-08/05	20	69	50.1	51	268	222	$4,538.20	$0.00	$30,874
Baseline in Year 1: 0/04-08/05	20	69	50.1	52	208	200	$4,404.84	$65.02	$28,574
Year 2: 09/05-08/06	21	70	50.5	52	276	244	$4,429.54	$0.14	$27,001
Baseline in Year 2: 09/05-08/06	21	70	51.2	52	184	178	$4,407.12	$0.14	$27,001

Utilization Measures	Baseline	Year 1	Baseline in Year 1	Year 2	Baseline in Year 2
Admissions/1000	790.2	1,121.6	1,065.9	1,025.6	928.3
Days/1000	6,223.3	7,414.4	7,571.3	6,687.2	6,076.0
Office visits/person	10.6	13.1	11.9	11.9	10.7
ER visits/person	1.5	2.1	2.0	2.0	1.8
Home visits/person	9.5	14.8	13.3	17.7	16.3
Prescriptions/person	175.1	198.3	196.1	212.2	213.7

PMPM Payments	Baseline	%Tot	Year 1	%Tot	Baseline in Year1	%Tot	Year 2	%Tot	Baseline in Year 2	%Tot
Inpatient	$868.25	22.8	$1,054.41	23.2	$1,065.99	24.2	$934.00	21.1	$929.26	21.1
LTC	$180.63	4.7	$217.02	4.8	$237.30	5.4	$232.29	5.2	$259.00	5.9
Outpatient	$310.25	8.1	$354.00	7.8	$350.77	8.0	$253.89	5.7	$255.54	5.8
Office	$348.01	9.1	$539.53	11.9	$519.85	11.8	$563.42	12.7	$513.26	11.6
ER	$39.45	1.0	$55.83	1.2	$52.46	1.2	$55.82	1.3	$46.18	1.0
Home	$829.50	21.8	$890.49	19.6	$789.01	17.9	$888.85	20.1	$879.97	20.0
Pharmacy	$821.23	21.6	$941.38	20.7	$928.71	21.1	$943.27	21.3	$976.48	22.2
Supplies	$55.62	1.5	$77.10	1.7	$71.60	1.6	$98.98	2.2	$97.07	2.2
DME	$183.54	4.8	$166.70	3.7	$156.21	3.6	$188.99	4.3	$182.03	4.1
Transportation	$141.30	3.7	$192.55	4.3	$186.73	4.2	$211.17	4.8	$208.63	4.7
Other	$32.43	0.9	$49.19	1.1	$46.21	1.0	$58.86	1.3	$59.70	1.4
Total	$3,810.21	100%	$4,538.20	100%	$4,404.84	100%	$4,429.54	100%	$4,407.12	100%