Collaborative Care Implementation

COSTS ACROSS 10 UNITED STATES HEALTH SYSTEMS

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MEADOWS MENTAL HEALTH POLICY INSTITUTE

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Meadows Mental Health Policy Institute

Collaborative Care Implementation Costs Across 10 U.S. Health Care Systems

Executive Summary

Collaborative Care (CoCM) is an evidence-based treatment model for behavioral health integration. Typically implemented in general medical or pediatric settings, CoCM leverages the services of a specially trained behavioral health care manager to jointly manage a panel of patients with the medical team and a designated psychiatric consultant. CoCM has been shown to be effective in the early identification and treatment of mental health conditions. This integration of services addresses access barriers and the stigma often associated with seeking mental health services. However, because questions have been raised about implementation costs associated with CoCM, we set out to analyze CoCM implementation cost data from 10 health systems nationwide that varied in size, geographical region, and urban/rural setting. The results of this study further confirm that CoCM is both efficient and cost-effective, with its value being driven by resource sharing and a drastically reduced need for psychiatric clinical time.

CoCM Implementation Costs Across 10 U.S. Health Care Systems										
Cost Parameter	Cost Lower Bound	Cost Upper Bound	Mean Cost	Median Cost						
Small Systems (<1,000,000 Annual Outpatient Encounters) – N=3										
Leadership Costs	\$44,531	\$287,729	\$150,566	\$119,438						
IT Costs	s Limited Data Available									
Operations	\$14,269	\$54,713	\$34,963	\$35,909						
Vendor Costs	\$0	\$25,365	\$8,889	\$1,302						
Overall Costs Per Clinic	\$58,800	\$324,940	\$194,418	\$199,515						
Medium Systems (1,000,0	00 – 5,000,000 Annual	Outpatient Encounters) – N=3							
Leadership Costs	\$47,516	\$467,279	\$195,678	\$72,240						
IT Costs	\$0	\$72,816	\$24,567	\$886						
Operations	\$13,361	\$20,645	\$18,208	\$20,619						
Vendor Costs	\$0	\$7,552	\$2,702	\$555						
Overall Costs Per Clinic	\$69,047	\$488,191	\$241,156	\$166,229						
Large Systems (1,000,000	– 5,000,000 Annual Ou	itpatient Encounters) –	N=4							
Leadership Costs	\$22,152	\$450,810	\$150,562	\$64,644						
IT Costs	\$550	\$100,000	\$36,206	\$22,138						
Operations	\$0	\$83,927	\$31,190	\$20,417						
Vendor Costs	\$0	\$20,193	\$9,588	\$9,080						
Overall Costs Per Clinic	\$48,595	\$652,896	\$227,547	\$104,348						
All Health Care Systems –	N=10									

CoCM Implementation Costs Across 10 U.S. Health Care Systems									
Leadership Costs	\$22,152	\$467,279	\$164,098	\$88,177					
IT Costs	\$0	\$100,000	\$21,853	\$718					
Operations	\$0	\$83,927	\$28,427	\$20,632					
Vendor Costs	\$2,702	\$9,588	\$7,313	\$928					
Overall Costs Per Clinic	\$48,595	\$652,896	\$221,691	\$161,512					

Overall, the median cost per CoCM clinic implemented was \$160,000, with this figure ranging from \$49,000 to \$650,000. Smaller health systems had a higher median cost per clinic implemented (\$200,000), while larger systems had a smaller median cost (\$10,000). Of note, one large health system using a turnkey CoCM vendor experienced markedly reduced per-clinic implementation costs (\$49,000) relative to the median. Across health systems, leadership personnel costs accounted for 70% of total CoCM costs, suggesting that efficient implementation with the involvement of fewer high-level leadership personnel for shorter periods of time may be favorable in reducing overall implementation spending. Finally, our findings demonstrated that direct CoCM operational costs accounted for less than 20% of implementation spending, highlighting the value inherent in CoCM that is driven by task sharing and the need for a relatively small amount of psychiatric consultant clinical time.

Background

Collaborative Care (CoCM) is an evidence-based treatment model for behavioral health integration. Typically implemented in general medical or pediatric settings, CoCM leverages the services of a specially trained behavioral health care manager (BHCM) to jointly manage a panel of patients with the medical team and a designated psychiatric consultant. Upwards of 100 randomized controlled trials (RCTs) have demonstrated CoCM's efficacy across numerous populations, diagnostic groups, and treatment settings. 1,2,3,4,5,6 Additionally, a growing number of studies have reported the model's effectiveness outside of controlled research settings, demonstrating the successful implementation of CoCM in the real world. 7,8,9

Implementation costs and financial sustainability questions have often surrounded CoCM, stemming from its early adoption of telehealth, focus on between-encounter care, unconventional team structure, use of task-sharing, and integration of behavioral health treatment into physical health settings. ¹⁰ For several years, CoCM did not have dedicated billing codes, forcing implementing health systems to limit billing to specific model components, use grant funding, or resort to other stopgap financing measures. ¹¹ Medicare's CoCM-specific billing codes, activated in 2017, changed the context by providing a clear financial pathway for implementing and sustaining the model. In the following years, these codes became increasingly favorable as they were adopted by commercial and public payers nationwide. ^{12,13} Additionally, concerns about CoCM's real-world financial viability have been allayed by several studies demonstrating its cost-effectiveness ^{14,15,16} and return on investment (ROI)¹⁷.

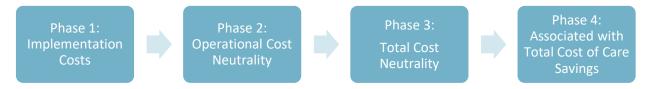
However, due to a lack of published or readily available data, questions remain surrounding CoCM implementation costs and time to operational or total cost neutrality. Further, there is a paucity of data demonstrating real-world ROI or total cost of care reduction tantamount to findings from published studies, which are often conducted in the context of highly resourced clinical trials with uncertain external validity or applicability. In recent years, some methodologically rigorous studies have evaluated CoCM implementation costs (**Table 1**), with published estimates ranging from \$24,000 to \$89,000 per clinic. However, these studies have often evaluated a relatively small number of clinics and health systems, limiting their scope and generalizability.

Table 1: Co	Table 1: CoCM Implementation Costs Literature Review										
Study	U.S.	Population	Data	# Health	#Clinics	Implementation	Total Cost				
	Region		Collection	Systems		Period Range	Range				
			Methodology			(per clinic, months)	(per clinic)				
Hoeft et	West	Older	Retrospective	6	6	19 - 36	\$39,280 -				
al, 2019		Adults with	and				\$60,574				
		Depression	Prospective								
Hunt et	West	Adults with	Prospective	1	2	42	\$88,899				
al, 2017		SUD									

Miller et	Nationwide	Veterans	Retrospective	1	9	25	\$24,476
al, 2020		with BH	and				
		problems	Prospective				

We contribute to the extant literature by employing a pragmatic, comprehensive approach to evaluating implementation costs while leveraging our novel framework for the CoCM cost-revenue-savings continuum from implementation costs to total cost of care reductions (Figure 1). This manuscript will focus primarily on the first phase of the continuum, with subsequent investigations evaluating phases two through four.

Figure 1: CoCM Cost-Revenue-Savings Continuum



Methods

We conducted 13 one-hour semi-structured interviews with key informants from 12 health systems nationwide. All systems have been de-identified in this document. Prospective interviewees were identified through a nationwide purposeful sampling strategy. Yey informants were individuals identified by each organization as having first-hand knowledge of CoCM implementation costs. They included family medicine physicians, psychiatrists, psychologists, operations directors, and program managers, among others. We adapted our interview guide from a published study on CoCM implementation costs, which served as a conceptual model and framework. With due permission, all interviews were recorded and transcribed using an online service. At least two members of the study team reviewed each transcript. Weekly meetings were conducted to resolve discrepancies, with a third team member engaged as needed. Data were extracted from recordings and transcripts into tables, which were iteratively updated and analyzed. Additional data and clarification were obtained via email and telephone. Participants were offered \$30 gift cards as an honorarium.

Most of the data in this evaluation were gathered retrospectively from interviewee reports and recall. On limited occasions, interviewees provided summary de-identified quantitative data directly to our team. Our analysis included two overlapping implementation periods defined for each organization – one at the overall health system level and another at the clinic level for each individual practice implementing CoCM. We defined the beginning of each health system-level implementation period according to the specified date (or date range) provided by the interviewees. This led definitions to vary somewhat across systems, with some noting the beginning to be the time when CoCM was initiated in the first clinic and others including a pre-

initiation preparatory or planning period. Health system-level implementation periods were considered completed either on a specified date (or date range) provided by the interviewees or three months following CoCM initiation at the most recent clinic. For health systems that had not yet completed their CoCM implementation at the time of interview, we considered the implementation period to be completed three months after initiation at the most recent clinic. Leadership personnel costs were estimated using the percentage of full time equivalent (FTE) effort devoted specifically to CoCM during the health system-level implementation period, accounting for all available information (including shifting effort devoted to CoCM over time). Expenditures related to internal CoCM registry and electronic health record (EHR) builds were fully considered implementation costs, even if the costs were not fully incurred during the designated health system-level implementation period.

Clinic-level implementation periods began at the time of each individual clinic's CoCM initiation and lasted for three consecutive months. CoCM clinical operations costs (including clinical personnel, information technology (IT) resources, etc.) during these three-month periods at each clinic were considered implementation costs. Our team made this decision after reviewing a previous study's methodological considerations in detail.²¹ By extension, CoCM operations costs after this three-month period at each clinic were excluded and considered ongoing costs. For IT (e.g., some vendor registry costs) and centralized personnel (e.g., CoCM triage or referral resources) costs that were fixed and independent of the number of individual clinics or users, we summed costs attributable to each clinic accounting for the equal distribution of costs among all actively practicing CoCM clinics. For example, with a fixed monthly vendor CoCM registry cost, one-third of the monthly registry cost would be attributed to the third clinic implemented sequentially. Personnel costs in the clinic-level implementation period were calculated based on estimated effort devoted specifically to CoCM.

When interviewees did not provide salary figures, we used the best match available from the U.S. Bureau of Labor Statistics (BLS) salary estimates website for the specific health system region (typically defined at the U.S. Metropolitan Statistical Area [MSA] level). When fringe benefit costs were not provided, we used an estimate of 30% in accordance with prior studies. We did not estimate organization overhead costs attributed to CoCM implementation. Health system sizes were extracted from a national database maintained by the American Hospital Association®. Systems were stratified into small (<1 million), medium (1-3 million), and large (>3 million) groups based on the total number of annual outpatient encounters.

For each health system, we calculated total costs and costs across various sub-categories (e.g., IT costs). Additionally, we calculated per-clinic and per-clinic-month costs to facilitate comparisons to previously published data and across systems of disparate sizes and implementation time periods. All calculations were conducted using Microsoft Excel. For ease of interpretation in the manuscript text, all figures are rounded to two significant digits.

Table 2: Per-Clinic CoCM Implementation Costs Grouped by Health System Size										
Cost Parameter	Cost Lower Bound	Cost Upper Bound	Mean Cost	Median Cost						
Small Systems (<1,000,000 Annu	al Outpatient Encounters	s) – N=3								
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Vendor Costs	\$2,702	\$9,588	\$7,313	\$928						
Overall Costs Per Clinic	\$48,595	\$652,896	\$221,691	\$161,512						

Results

Of the 12 interviewed health systems, 10 provided sufficient data to develop CoCM implementation cost estimates. The two remaining systems were contacted multiple times to obtain additional data, but we were unable to successfully obtain the necessary figures. As a result, these systems were excluded from the final analysis. Included health systems spanned all four U.S. Census Regions (Northeast, Midwest, South, West) and were predominately urban. Five health systems used grant funding to defray CoCM implementation costs, while seven employed a CoCM implementation vendor (e.g., for training, registry, or other tasks). The average health system implementation included nine clinics (range of one to 22 clinics) and had an implementation period spanning 28 months (range nine to 59 months). Only one

interviewed health system used a turnkey CoCM vendor, meaning that all CoCM clinical and billing operations (other than primary care or pediatric clinical services) were managed by a contracted third-party vendor.

Total CoCM costs varied considerably across health systems – the median cost was \$1,100,000, with individual health systems ranging from \$390,000 to \$2,000,000. The single largest implementation cost driver was leadership personnel, which accounted for approximately 70% of the total costs. The smallest component, on average, was vendor or consultant costs, which accounted for less than 3% of the total. The median cost per CoCM clinic implemented was \$160,000, with this figure ranging from \$49,000 to \$650,000. Smaller health systems had a higher median cost per clinic implemented (\$200,000) than medium (\$170,000) and large systems (\$100,000).

Per-clinic implementation costs grouped by health system size are shown in **Table 2**, while detailed implementation cost figures for all health systems, in addition to all-health system means and medians, are shown in **Table 3**.

Discussion

This pragmatic evaluation of CoCM implementation costs is among the most comprehensive and detailed known to the authors. We present CoCM implementation cost data from 10 predominately urban health systems across all four U.S. Census regions, finding that the median total cost was \$1,100,000, with individual health systems ranging from \$390,000 to \$2,000,000. The average health system included nine clinics and had an implementation period spanning 28 months, though the range was from nine to 59 months. The median cost per CoCM clinic implemented was \$160,000, with this figure ranging from \$49,000 to \$650,000. Smaller health systems had a higher median cost per clinic implemented (\$200,000), while larger systems had a lower median cost (\$100,000). Implementation costs were primarily driven by leadership personnel, which accounted for an average of 70% of the total costs. These data are timely and have the potential to facilitate the implementation of CoCM nationwide by allowing health systems to better understand expected component costs and prepare financially. Additionally, our findings are relevant to current proposed Federal legislation that would partially subsidize CoCM implementation costs for medical practices nationwide and provide large-scale technical implementation assistance.²³

The median CoCM cost per clinic implemented across all health systems in this evaluation (\$160,000) was higher than those identified in previous studies, which found costs to range from \$24,000 to \$89,000 per clinic.^{24,25,26} Though four of the 10 health systems in our evaluation were within the range suggested by these prior studies, our overall mean and median were skewed upward by higher-end figures from individual systems (e.g., \$650,000).



Our analysis also identified several findings not previously described to the authors' knowledge. First, we found that implementation costs incurred by the single health system in our sample that used a turnkey CoCM vendor (\$390,000) were far below the health system median (\$1,100,000). In this health system of interest, consultant or vendor costs (\$160,000) were above the median (\$4,500), as expected, while leadership costs (\$180,000) were far below the median (\$520,000). The use of a turnkey vendor for CoCM implementation allows the health system to "outsource" some leadership and training tasks to the vendor (in addition to core CoCM clinical operations costs), which already has well-established workflows in place. Since our evaluation findings demonstrated that leadership personnel costs tended to drive overall CoCM implementation costs, we contend that this outsourcing had a clear cost-reducing effect.

Further, it is noteworthy that turnkey CoCM vendors most often charge health systems, after an initial implementation fee, a set fee per CoCM Current Procedural Terminology® (CPT®) code submitted longitudinally. If CoCM clinical volume is low immediately following go-live, which is commonly observed, then the health system pays a comparatively lower amount to the vendor during this time. In such cases, the amount paid to the vendor is likely to increase over time as the CoCM clinical volume increases. This trend notwithstanding, we see the lower implementation costs incurred by the system employing a turnkey vendor in our evaluation as an encouraging finding that supports other systems considering this approach in the future. At the same time, health systems that choose to outsource implementation completely to a vendor may face different challenges (e.g., inability to directly control CoCM treatment quality or appointment waiting times), and it remains unknown whether overall CoCM costs remain lower over the long term (i.e., beyond the implementation period) relative to systems that build CoCM internally.

Second, we found that the health systems with the highest overall costs were not necessarily the least efficient when costs were presented per clinic or per clinic-month (and vice versa). For example, the health system with the second highest overall CoCM implementation costs had the sixth and seventh (out of 10) highest costs when viewed per clinic and per clinic-month, respectively. On its face, this merely suggests that implementation is more costly overall when the health system has a larger number of clinics and greater scale, which is unsurprising. However, upon further consideration, it also demonstrates that longer implementation periods are associated with higher overall implementation costs. As described above, leadership personnel costs account for more than 70% of the total average implementation costs, so longer implementation periods (including costly leadership involvement) have the potential to drive costs upward substantially. This finding supports the development of a thoughtful CoCM implementation strategy that prioritizes administrative efficiency and minimizes the implementation period duration. At the same time, our findings suggest that larger health systems benefit from economies of scale, despite their overall higher costs. This is evidenced by



the fact that per clinic CoCM implementation costs were highest for the smaller systems (as defined by annual outpatient encounters) and lowest for the larger systems.

Third, our findings showed that CoCM initial operational costs were not among the primary drivers of overall implementation costs, accounting for approximately 17% of the total on average. As mentioned previously, we considered the first three months after CoCM go-live at each clinic to be part of the implementation period (and therefore part of the implementation costs), with operational costs beyond the initial three months excluded from our totals. This qualification notwithstanding, we contend that the relatively low cost of clinical operations associated with CoCM implementation is notable, especially the low overall psychiatric consultant costs attributable to the minimal amount of psychiatric consultant time required for the model. Additionally, it is noteworthy that operational costs for BHCMs, who typically work full-time (or close to full-time), are not among the primary drivers of total CoCM implementation costs. Overall, these findings underscore the value of CoCM, especially how the model leverages scarce behavioral health clinical expertise and resources to provide care to large populations of patients at a relatively low operational cost.

Our findings are limited in several ways. Most notably, we primarily relied on the retrospective recall and report from our interviewees, an unavoidable limitation since we aimed to assess CoCM implementation costs of health systems with existing CoCM programs. We mitigated the impact of this limitation by triangulating data across interviewees when possible. However, our methodological strategy differed from those employed by previously published CoCM implementation cost studies, which at times utilized rigorous and evidence-based prospective methods such as Time-Driven Activity-Based Costing (TDABC). 27,28 Additionally, some of the CoCM implementation costs that we aimed to determine from health systems were either extremely challenging to assess retrospectively or fundamentally unknown. One notable example is internal IT costs. These costs are often incurred as parts of larger IT build projects (e.g., Electronic Health Record builds) and are difficult to attribute exclusively to CoCM implementation. We mitigated this limitation by asking numerous follow-up questions of participating interviewees and engaging other health system leaders (e.g., IT leadership) when necessary. Additionally, multiple interviewees mentioned how the COVID-19 pandemic had interfered with their CoCM implementation and made it more challenging to measure implementation costs systematically.

Conclusions

This pragmatic evaluation retrospectively assessed CoCM implementation costs from 10 predominately urban health systems across the U.S. using semi-structured key informant interviews. Total implementation costs ranged from \$390,000 to \$2,000,000, with the median being \$1,100,000. The average health system CoCM implementation included nine clinics and

had an implementation period spanning 28 months, though the range was from nine to 59 months.

The median cost per CoCM clinic implemented was \$160,000, with this figure ranging from \$49,000 to \$650,000. Smaller health systems had a higher median cost per clinic implemented (\$200,000), while larger systems had a smaller median cost (\$100,000). Of note, one large health system using a turnkey CoCM vendor experienced markedly reduced per-clinic implementation costs (\$49,000) relative to the median. Across health systems, leadership personnel costs accounted for 70% of total CoCM costs, suggesting that efficient implementations with the involvement of fewer high-level leadership personnel for shorter periods of time may be favorable in reducing overall implementation spending. Finally, our findings demonstrated that direct CoCM operational costs accounted for less than 20% of implementation spending, highlighting the value inherent in CoCM that is driven by task sharing and the need for a relatively small amount of psychiatric consultant clinical time.

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Table 3: Colla	borative Care Implementatio	n Costs Across	Ten U.S. Healtl	h Systems									
	Health System	1	2	3	4	5	6	7	8	9	10	Mean	Median
U	S Census Region	W	S	NE	NE	NE	MW	NE	MW	W	NE	-	-
Ur	ban/Rural Setting	Urban	Urban	Urban	Urban	Urban	Urban	Urban	Rural	Urban	Urban	-	-
Gran	t Funding for CoCM	Yes	No	Yes	No	Yes	No	Yes	Yes	No	No	-	-
ı	mplementation												
Us	ed CoCM Vendor	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	-	-
Н	ealth System Size	Large	Small	Medium	Large	Medium	Large	Medium	Small	Large	Small	-	-
Num	ber of CoCM Clinics	8	4	4	21	7	12	22	8	1	4	9	7.5
Impleme	ntation Period (Months)	11	21	15	36	12	55	59	45	9	19	28	20
Leadership	Senior Leadership	\$91,667	NA	\$1,171,109	NA	\$143,650	\$420,062	\$303,733	NA	\$162,071	\$25,163	-	-
Costs	BH Medical Directors	\$22,917	\$477,750	\$568,750	\$314,127	\$218,577	\$126,019	\$520,478	\$262,500	\$165,465	\$839,582	-	-
	Program Management	\$50,025	NA	\$69,688	\$214,500	\$104,000	\$260,000	NA	NA	\$20,679	\$286,170	-	-
	Admin/Operations	\$5,729	NA	\$59,568	NA	\$10,767	\$443,300	\$221,150	\$93,750	\$62,592	NA	-	-
	Primary Care Champions	\$6,875	NA	NA	NA	\$28,683	NA	NA	NA	\$40,003	NA	-	-
	Subtotal (%)	\$177,213	\$477,750	\$1,869,115	\$528,627	\$505,677	\$1,249,381	\$1,045,361	\$356,250	\$450,810	\$1,150,915	\$781,110	\$517,152
		(0.456)	(0.599)	(0.957)	(0.485)	(0.435)	(0.664)	(0.688)	(0.757)	(0.690)	(0.885)	(0.696)	
IT Costs	EHR Build	\$50,000	NA	NA	\$11,550	\$500,000	\$304,200	\$19,500	NA	\$100,000	NA	-	
	Other technologies	NA	NA	NA	NA	\$9,711	\$152,100	NA	NA	NA	NA	-	
	Subtotal (%)	\$50,000	\$0	\$0	\$11,550	\$509,711	\$456,300	\$19,500	\$0	\$100,000	\$0	\$114,706	\$15,525
		(0.129)	(0.000)	(0.000)	(0.011)	(0.438)	(0.243)	(0.013)	(0.000)	(0.153)	(0.000)	(0.102)	
Operations	ВНСМ	NA	\$126,750	\$45,500	\$211,250	\$131,250	\$143,325	\$141,504	\$88,950	\$41,700	\$103,010	-	
Costs	Psychiatric Consultant	NA	\$35,100	\$7,942	\$42,250	\$13,081	\$32,533	\$22,613	\$25,200	\$13,425	\$40,625	-	
	Primary Care Providers	NA	\$37,000	NA	NA	NA	NA	NA	NA	NA	NA	-	
	Other CoCM Team	NA	NA	NA	\$295,750	NA	NA	\$290,065	NA	\$28,802	NA	-	
	Other Materials	NA	\$20,000	NA	\$500	NA	NA	NA	NA	NA	NA	-	
	Subtotal (%)	\$0	\$218,850	\$53,442	\$549,750	\$144,331	\$175,858	\$454,182	\$114,150	\$83,927	\$143,635	\$193,813	\$143,983
		(0.000)	(0.274)	(0.027)	(0.504)	(0.124)	(0.093)	(0.299)	(0.243)	(0.129)	(0.111)	(0.173)	
Vendor or	Consultant Costs	NA	\$53,000	\$25,000	NA	NA	NA	NA	\$0	\$3,758	NA	-	
Consultant	Training Materials	NA	NA	NA	NA	NA	NA	NA	NA	\$14,401	NA	-	
Costs	Vendor Initiation Costs	\$50,000	\$12,000	NA	NA	NA	NA	NA	NA	NA	NA	-	
	Registry	NA	\$36,458	\$5,208	NA	\$3,884	NA	NA	NA	NA	\$5,208	-	
	Turnkey CoCM Services	\$11,544	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	
	Legal Counsel Costs	\$100,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	
	Subtotal (%)	\$161,544	\$101,458	\$30,208	\$0	\$3,884	\$0	\$0	\$0	\$18,159	\$5,208	\$32,046	\$4,546
		(0.416)	(0.127)	(0.015)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.028)	(0.004)	(0.029)	
Impleme	ntation Costs Per Clinic –	\$48,595	\$199,515	\$488,191	\$51,901	\$166,229	\$156,795	\$69,047	\$58,800	\$652,896	\$324,940	\$221,691	\$161,512
	Cost (Rank)	(10)	(4)	(2)	(9)	(5)	(6)	(7)	(8)	(1)	(3)		
Implementat	ion Costs Per Clinic-Month -	\$4,418	\$9,501	\$32,546	\$1,442	\$13,852	\$2,851	\$1,170	\$1,307	\$72,544	\$17,102	\$15,673	\$6,960
	Cost (Rank)	(6)	(5)	(2)	(8)	(4)	(7)	(10)	(9)	(1)	(3)		
Total Ir	nplementation Costs -	\$388,757	\$798,058	\$1,952,765	\$1,089,927	\$1,163,603	\$1,881,539	\$1,519,043	\$470,400	\$652,896	\$1,299,758	\$1,121,675	\$1,126,765
	Cost (Rank)	(10)	(7)	(1)	(6)	(5)	(2)	(3)	(9)	(8)	(4)		