EXPERT REPORT OF
JAMES HEENAN, STUART MCCRARY, AND MICHAEL NEUPERT

Prepared in the Matter of:

LENIL COLBERT, CONSTANCE GRAY, ERNEST REEVES, KENYA LYLES, and DWIGHT SCOTT, for themselves and all others similarly situated,

Plaintiffs

v.

BRUCE RAUNER, in his official capacity as Governor of the State of Illinois, et al.

Defendants

May 2016

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I. Introduction

Counsel for Class Plaintiffs asked Berkeley Research Group, LLC ("BRG"), to provide consulting services on behalf of the Class Plaintiffs in the matter of Lenil Colbert, Constance Gray, Ernest Reeves, Kenya Lyles, and Dwight Scott, et al. v. Bruce Rauner, et al. (the "Matter"), on or about November 23, 2011. Specifically, BRG was asked to provide database development, analytical support and to develop an analysis to determine the financial feasibility of a plan to transfer Colbert Class Members from Skilled Nursing Facilities ("SNF") to a more independent living environment in Communities.

II. Background

Class Plaintiffs filed a complaint against various Illinois state officials on August 22, 2007, alleging violations of Title II of the American with Disabilities Act ("ADA") and the Social Security Act ("SSA"). Class Plaintiffs alleged that Defendants were denying persons currently residing in SNFs in Cook County, Illinois, the opportunity to live in community-based settings that would allow them to lead more meaningful and productive lives if they so desired.

On August 30, 2011, the parties resolved that matter and filed a Joint Motion for Preliminary Approval of Consent Decree and Approval of Notice Plan. The Court granted the motion and approved the Consent Decree on December 21, 2011.

The terms of the Consent Decree include the following key provisions:

- Class Definition – All Medicaid-eligible adults with disabilities who are being, or may in the future be, unnecessarily confined to nursing facilities located in Cook County, Illinois, and who, with appropriate supports and services, may be able to live in a more independent community-based setting.

- Development of a disability services system capable of providing support and other resources allowing eligible class members to transition to community-based settings.

- Establishment of a benchmark implementation plan to transition at least 1,100 eligible Class Members into community-based settings as a means to evaluate the financial viability of a cost-neutral plan.

- Creation of a database containing relevant data elements and analytics to provide sufficient data to allow for the development of a plan to transition Class Members at a cost that (for the State of Illinois) is equal to or less than the existing cost of keeping Class Members in SNFs (the "Cost Neutral Plan").

BRG agreed to create a database containing all transactions related to the cost for care and housing of Class Members, to perform analytics and to provide assistance to the parties related to analyze and compare the costs prior to transition ("pretransition") and subsequent to transition ("post transition") for Class Members transferring from SNFs into community-based settings. This effort included coordination with legal, administrative, financial and IT personnel within various state agencies to identify and obtain data sources related to pretransition and post transition costs, clinical encounter data and demographic data for Class Members in order to create a database to analyze. Defendants also agreed to use and rely upon BRG's work and analysis and did not retain their own consultants.

III. Berkeley Research Group, LLC

Berkeley Research Group is a leading global strategic advisory and expert consulting firm that provides independent advice, data analytics, authoritative studies, expert testimony, investigations, and regulatory and dispute consulting to Fortune 500 corporations, financial institutions, government agencies, major law firms, and regulatory bodies around the world.

BRG experts and consultants combine intellectual rigor with practical, real-world experience and an in-depth understanding of industries and markets. Their expertise spans economics and finance, data analytics and statistics, and public policy in many of the major sectors of our economy, including healthcare, banking, information technology, energy, construction, and real estate.

Key personnel within BRG that consulted on this effort are:

James E. Heenan – Managing Director

Jim Heenan has had a 40-year career in financial and strategic management with companies in the healthcare, long-term care, insurance, consumer products, and consulting industries. He has extensive experience in areas of budgeting, forecasting, financial reporting, mergers and acquisitions and has managed administrative and financial staffs. He is a Certified Public Accountant and has consulted and provided testimony on accounting-related matters. Mr. Heenan's resume is attached as **Exhibit 1**.

Michael W. Neupert – Senior Managing Consultant

Michael Neupert is a Senior Managing Consultant with Berkeley Research Group, LLC, and is a member of the firm's healthcare, health insurance and pharmaceuticals practice. He has over seven years of experience analyzing the financial and economic conditions of payors, providers and other health service organizations. He is a Certified Valuation Analyst and has experience in both litigation support and complex management consulting matters. Mr. Neupert's resume is attached as **Exhibit 2**.

Stuart McCrary – Managing Director

Stuart McCrary is a trader and portfolio manager who specializes in traditional and alternative investments, quantitative valuation, risk management, and financial software. Before joining BRG, he spent 13 years consulting on a wide range of capital markets issues including litigation consulting, valuation, modeling, and risk management. Previously, he was president of Frontier Asset Management, a market-neutral hedge fund. He held positions with Fenchurch Capital Management as senior options trader and CS First Boston as vice president and market maker, where he traded OTC options and mortgage-backed securities. Prior to that, he was a vice president with the Securities Groups and a portfolio manager with Comerica Bank. Mr. McCrary is the author of several books, including How to Create and Manage a Hedge Fund: A Professional's Guide (John Wiley & Sons, 2002). Mr. McCrary's resume is attached as **Exhibit 3**.

Additional professionals within BRG also contributed to the content of this report.

IV. Cost Data and Sources

Definition of Cost

The Consent Decree requires a comparison of net costs incurred by the State of Illinois before and after Class Member transition as a key component of the development of a Cost Neutral Plan. The Consent Decree includes language describing examples of various specific costs that the parties expected to be incurred but it is not necessarily a comprehensive list. The overriding objective of the Cost Neutral Plan is to facilitate "transitioning all Class Members desiring to transition to Community-Based Settings at a cost the same or less in the aggregate to the State as if those Class Members had remained in the Nursing Facilities."[1]

[1] Colbert Consent Decree Implementation Plan, November 8, 2012, at 6.

The word "cost" by itself is ambiguous and required clarification prior to the development of a database. The following are cost concepts and classifications that can influence a cost comparison.

Historical Cost – This is the term generally used in Generally Accepted Accounting Principals' (GAAP) as representing the original purchase cost (by cash or cash equivalent) for an asset at the time of purchase transaction.

Fixed Cost – A fixed cost is one that the amount of which is not expected to change in total within a reasonable range of time or activity.

Variable Cost – A variable cost is expected to change proportionately with volume or activity.

Inflation Adjusted Cost – Any fair comparison of costs over an extended period of time should include an estimate of the impact of inflation on the delta. By using the Consumer Price Index or other more appropriate targeted indices, a current cost can be adjusted to the same basis as a similar cost incurred in prior periods.

Case Mix Adjusted Cost – The cost of care for Class Members can be impacted by various factors including both patient demographics and clinical acuity. Case mix adjustments can be used to adjust costs for varying risk factors.

Incremental Cost – An incremental or marginal cost is the measurement of the increased total cost resulting from an increase in volume or activity.

BRG's objective was to identify and accumulate all net costs[2] incurred by the State of Illinois for all Class Members residing in SNFs and all post transition net costs incurred by the State of Illinois for transitioned Class Members to develop an accurate comparison of pretransition and post transition net costs for transitioned Class Members. While completing this analysis, BRG assumed that an incremental cost approach adjusted for inflation would be most appropriate. (See Key Assumptions and Limiting Conditions below.)

Costs Identified

Generally, Class Members pretransition costs are reasonably simple to accumulate since these costs are all processed through the State of Illinois Medicaid Management

[2] Net cost is the total paid cost for products or services to the State of Illinois less any adjustments for Class Member contributions, Medicare revenue and Federal Medicaid matching funds credited to the State.

Information System ("MMIS"). Post transition services and their costs are more complex and are commonly processed through different systems by various State departments. A matrix summarizing post transition services available to Class Members and their contracted costs is attached as **Exhibit 4**. The matrix was used as a guide for preparing this report. The services being provided are arranged into the following categories:

- Outreach and Education including programs and services designed to promote and educate Class Members regarding their potential eligibility for relocation from a SNF to a community-based setting if they so desired.

- Medicaid program disbursements processed through the MMIS described later in this report.

- Care Coordination, including Class Member suitability assessment, transition activities and coordination of all needed services.

- Housing Assistance, including site selection, home modification (where necessary), rental assistance and initial household set-up.

- State Funded Non-Medicaid Costs for Independence and Service Capacity Building, including meals, transportation, living skills training and mental health assistance.

- Other Administrative costs, including organizational expenses incurred to establish and monitor the development of the Implementation Plan and Consent Decree.

The Consent Decree requires the Cost Neutral Plan to contain a comparison of the annualized state-funded costs before and after transition for each Colbert Class Member transferred to a community-based setting. This requires analysis of all state-funded programs and contracted services within each cost category to determine how costs were to be assigned to particular transitioned Class Members in the final Cost Neutral Plan. Most costs are captured and attributed to particular Class Members. However, other costs required review of analysis conducted by various State agencies, development of analytics by BRG, discussion and agreement to determine how these costs were to be captured and assigned to Class Members. Based upon these analyses and discussions with members within the Cost Neutral Planning Group, the following scenarios were agreed upon:

- Some Service/Cost Pools were identified as being funded through grant programs outside the State budget. These are shown in the Grant – Non State Funded column where they could be isolated and excluded from the comparison of costs before and after transition.

- The State of Illinois contracted with two Managed Care Organizations ("MCO") to provide for (among other things) evaluations and transition coordination for appropriate Class Members. The MCO contracts included provisions for one-time program startup expenses not expected to continue beyond the development of the Cost Neutral Plan.

- The State of Illinois entered into various contracts for the purpose of providing needed services to transitioned Class Members. These contracts required advance payments which were amortized and then applied to specific Class Members using the Class Member detail provided with the periodic billings for specific services provided. Vouchers received from these vendors included Class Member detail allowing for the capture of these costs by transitioned Class Member and amortization of these prepayments. Costs that could be assigned to a specific Class Member were directly assigned. Those costs that could not be assigned required an alternative treatment. One-time, non-recurring costs incurred for a specific transition-oriented event or service for a Class Member, including evaluation and success fees paid to MCOs and housing coordination service providers for the completion of transition goals, are assumed to benefit the Class Member well beyond the twelve months after transition and were amortized over a 10 year period. (See the discussion of Cost Amortization in the Key Assumptions and Limiting Conditions section below.)

Cost Data Sources

To ensure all potentially relevant cost and payment data elements were appropriately captured, reviewed, analyzed and understood, BRG conducted numerous collaborative discussions with the Court Monitor, counsel, participating members of the Cost Neutral Planning Group,[3] designated State of Illinois officials and others who have knowledge of Medicaid and other applicable state programs and who are responsible for maintaining such data. The following data systems were reviewed and analyzed and provided the data used in this report.

[3] The Cost Neutral Planning Group is led by the Court Monitor and is comprised of representatives from Class Plaintiffs' counsel, Defendants' counsel, Berkeley Research Group and key leadership from the Governor's office and relevant State agencies including Illinois Department on Aging, Department of Human Services and the Department of Healthcare and Family Services.

Medicaid Management Information System

The MMIS is used by the State of Illinois to capture all Medicaid claims data. Generally referred to as the Claims Processing Sub-System or Paid Claims System, MMIS captures claim level detail including, among other things, types of services rendered, charges and payment information. All claims processed through the MMIS include a unique Medicaid Recipient ID Number ("RIN") that allows for the tracking of activity by beneficiary. Information contained in MMIS and provided to BRG included Clinical data such as CPT and procedure codes, Medicaid provider information, drug claims activity, patient demographics, patient location and provider location.

Programmatic Administrative Accounting System

The Programmatic Administrative Accounting System ("PAAS") is a general ledger accounting system used by the Illinois Department of Healthcare and Family Services ("HFS") to capture, track and account for, among other things, clinical and administrative costs not processed and reported through MMIS. During the course of developing the various services required to evaluate, prepare, relocate and support transitioned Colbert Class Members, agreements were executed with various service providers that cannot be processed and paid through MMIS. HFS uses the PAAS system to capture these costs. Where possible, billings received from providers and processed through PAAS were accompanied by spreadsheets breaking down the billed costs by Class Member.

Accounting Information System

Similar to the PAAS system, the Accounting Information System ("AIS") is a general ledger accounting system utilized by the Illinois Department on Aging ("IDoA") to capture, track and account for, among other things, clinical and administrative costs not processed and reported through MMIS. During the course of developing the various services required to evaluate, prepare, relocate and support transitioned Class Members, agreements were executed with various service providers that could not be processed through the MMIS. IDoA uses the AIS system to capture these costs.

In addition to the above, interviews were conducted with members of various State of Illinois agencies who provided analysis and reports used to gain an understanding of the underlying costs associated with post transition support programs utilized by Class Members.

Other Program Costs

A number of services are being provided to transitioned Class Members via new or existing programs that cannot be tracked by and assigned to the specific Class Members using those services. The Cost Neutral Planning Group agreed, due to the extraordinary amount of time, effort and expense required to establish systems and protocols necessary to track this data for each Class Member and knowing that any such tracking would likely result in incorrect information,[4] that these costs would be estimated and accumulated in a format that would allow for each transitioned Class Member to be allocated an equal share of estimated total costs on a Per Member Per Month ("PMPM") basis. A detailed discussion and analysis of the PMPM cost allocation is included in the Key Assumptions and Limiting Conditions Section of this report.

V. Key Assumptions and Limiting Conditions

In performing the analyses related to this Matter, we relied upon the documents and information previously described in the Cost Data and Sources section of this report. Although nothing came to our attention that would suggest the information received was inaccurate, BRG did not conduct an audit or independent verification of the data and information provided was not prepared. We note that the data and information we used is the data and information used by the State of Illinois for all of its decisions and judgments in this area.

Due to the nature of this project and the multiple sources from which data was obtained, there were certain assumptions we needed to make for the capture of data, how it would be obtained and handled and ultimately treated in relation to the Class Members' pretransition and post transition cost comparison. The following summarizes the key assumptions that were discussed at length and agreed to by members of the Cost Neutral Planning Group.

Comparison of Costs Twelve Months Pretransition and Post Transition – The Consent Decree requires the parties to accumulate the data necessary for a fair comparison of costs for transitioned Class Members, between the twelve months prior to transition and the twelve months after transition. While pretransition costs are fairly straightforward and are processed through the MMIS, post transition costs include administration, care coordination, housing assistance and a myriad of other support services developed for outreach, determination of Class Member eligibility,

[4] For example, drop-in mental health facilities are used for Class Members and others needing these services. Sign-in sheets are used to capture the names of service users. Not everyone always signs in, many signatures are not legible and the names would need to be associated with RINs, a very time consuming task, thus any analysis of these sheets would not be accurate.

identification of housing alternatives, provision of life skills training and clinical assistance as necessary. Many of these costs are not processed through the MMIS and are being captured on State of Illinois' general ledger systems (PAAS and AIS).

Additionally, some of the costs incurred to evaluate and complete a transition are being incurred prior to the Class Members' transition date. Examples include the cost of the MCO evaluation to determine Class Member eligibility and the cost of identification, preparation and modification of housing for Class Members. These costs, while being incurred prior to transition, were included in the post transition cost pool.

Data Captured by RIN – Our overriding goal was to obtain all data at the transaction level with a RIN to assign each transaction to a specific Class Member. In a perfect world, this allows the analysis to avoid any potentially arbitrary allocation of costs. However, while all transactions posted to the MMIS are assigned to a RIN, not all costs processed through PAAS and AIS are assigned to a RIN. For example, certain outreach and education programs designed to create Class Member awareness of the transition opportunities cannot be assigned to any Class Member as they represent a broad program of communication to the entire Class. Treatment of costs not assignable to specific RINs is discussed below.

Cost Allocations – There are numerous costs being incurred that, for various reasons, are not or cannot be assigned to specific transitioned Class Members. As they represent costs incurred by the State in performance of the requirements of the Consent Decree, they must be accumulated and allocated to transitioned Class Members for inclusion on the comparison of pretransition and post transition costs. For example, two Managed Care Organizations (AETNA Better Health, Inc. and IlliniCare Health Plan) were contracted to evaluate, among other things, each Class Member referral to determine their eligibility and suitability for transition. These evaluations have yielded a significant share of Class Members being deemed inappropriate for transition at this time. The evaluation costs associated with Class Members deemed ineligible or inappropriate for transition, represents an incremental program cost that should be included in the post transition cost pool. They have been accumulated and allocated to all transitioned Class Members.

Cost Amortization – Certain post transition costs are being incurred for services that benefit Class Members beyond the twelve month post transition measurement period. Therefore, the full inclusion of these costs in the twelve months comparison would be inappropriate. Examples of these services/costs include the following:

- Evaluations conducted by MCOs

- Transition success fees paid to MCOs
- Various housing-related services (excluding rent subsidies)

Once these costs were identified, we made the determination that, on average, the benefit to Class Members would reasonably continue for approximately ten years after transition. Additionally, by examining the industry data available regarding the national average age of SNF admissions (80) and the average age of our transitioned Class Members (55 at transition), we determined that, under "normal" circumstances, a person currently aged 55 could expect to be admitted to a SNF in approximately 25 years at the age of 80. However, given the fact that each transitioned Class Member has one or more mental, physical or other clinical issues, it is more likely than not that they would be readmitted to a SNF before the age of 80. Discounting the delta (25 years) by 60% results in an estimated average readmission at ten years. (See **Exhibit 5**.)

Therefore, based on a 10-year amortization, the 10% of the cost pools falling into this category have been included in our twelve months post transition costs.

Administrative Costs – The costs associated with administration of transitions cannot be attributed to specific Class Members. This requires that they be accumulated and allocated on some basis to all transitioned Class Members. HFS accumulated Colbert related administrative costs in its PAAS general ledger accounting system from the initiation of the Colbert matter (the earliest cost is dated March 1, 2012) through June 30, 2014, after which, control of the Colbert program transferred to IDoA. IDoA has been accumulating its non MMIS Colbert related costs in its AIS general ledger accounting system since July 1, 2014, through the present day. Since the transitioned Class Member sample we are working with includes only Class Members who transitioned prior to July 1, 2014, and we accumulated only those administrative costs incurred through June 30, 2015, allowing for the full twelve months after the last transition date within our sample.

We summarized all of these costs into the following categories in order to determine how they might be treated in the post transition cost comparison to pretransition costs. The categories are:

- <u>Outreach and Education</u> costs that are 100% reimbursed to the State of Illinois and thus are not included in post transition costs. These include costs incurred by Age Options and the City of Chicago that were so identified on the data provided.
- <u>Community Mental Health Center ("CMHC") Quality Assurance</u> costs incurred by various providers including Association House of Chicago,

Community Counseling Centers of Chicago, Grand Prairie Services, Heartland Health Outreach, Inc., Kenneth young Center, Lutheran Social Services of Illinois, Pilsen-Little Village Community, Sertoma Center, Inc., Thresholds and Trilogy, Inc. The costs incurred here are believed to be for Class Member evaluation and post transition service planning similar to those provided by MCOs which are deemed to have a benefit to the State and Class Member beyond the first twelve months after transition. They are assumed to be amortized over a 10 year period as described and discussed in our report.

- Drop-in Centers administration costs incurred by Bobby E. Wright CCMHC, Kenneth Young Center and Pilsen-Little Village Community. These costs are similar to the CMHC administration costs in that they are incurred for the purpose of providing transition related planning services to Class Members and should be amortized over 10 years.
- Administration costs for IDoA staff and miscellaneous expenses incurred by IDoA are assumed to be operating costs that should be allocated 100% to transitioning Class Members based on transition date.
- Housing Locator administration costs incurred by HAAC are amortized over a 10 year period similar to HAAC expenses that are attributable to specific RINs.
- Court Monitor fees are included in the data received. We assumed that these costs would be reduced and ultimately eliminated once a final implementation plan is agreed by the parties and should be excluded from this calculation of post transition costs.
- Home Modification costs incurred by UIC ATU IGA are amortized over a 10 year period.
- Social Work fees incurred by UIJones 15 are for services that assist in transition planning and assumed to benefit the State and Class Members beyond the twelve months post transition. They are amortized over 10 years.

It was generally agreed and assumed that these programs benefit Class Members in the form of planning and care coordination and that the costs incurred during the fiscal years ended June 30, 2014, and 2015 would be the most appropriate pool of costs to be used for determining the amount to be included in the post transition costs of the transitioned Class Members in our sample.

Exhibit 6 summarizes the administrative costs data received from the inception of the Colbert program through June 30, 2015. The total administrative costs identified amount to $3,895,046.75, of which $3,700,408.29 was incurred during the two twelve month periods ending June 30, 2014, and 2015. There were 817 Class Members transitioned during the fiscal years ending June 30, 2014, and 2015.

We understand that all Outreach and Education costs are 100% reimbursable to the State and assumed that Court Monitor fees should be excluded from consideration/allocation to post transition costs. Eliminating these costs reduces the total allocable cost pool for administration to $2,852,990.54. Of this amount, $2,115,893.30 was amortized over ten years reducing the allocated administrative cost pool to $948,686.57. Allocating these net administration costs to the 817 Class Members transitioned during this two year period ending June 30, 2015, results in an addition of $1,161.18 of annual costs to be added to the post transition costs for each transitioned Class Member.

Per Member/Per Month Calculations – Various services required to assist some Class Members with their transition into an independent setting are being provided by programs established some time previous to this Matter. Rather than create new programs to provide the same services, the existing programs began accepting transitioned Class Members on an as needed basis. The members of the Cost Neutral Planning Group determined that the number of Class Members expected to use these services was generally limited and, upon evaluating alternatives, agreed that the amount of time, effort and expense required to establish a means to capture the actual incurred costs for the specific Class Members using those services would be far too onerous and well beyond any reasonable amount of administrative effort. The group agreed to use its best effort to estimate the value of the services being provided to Class Members and to allocate them to all transitioned Class Members on a PMPM basis. Examples of these services are:

- IDoA Home Delivered Meals – Meals-on-Wheels or other similar programs that deliver meals to recipients in their homes.
- IDoA Information & Assistance Programs – These programs assist in planning and arranging access to a wide range of community-based programs such as respite services, transportation, home-delivered meals and in-home services.
- DRS Independent Living Skills Program – DRS funds a statewide network of Centers for Independent Living that provides accessible programs and services designed to help all people with disabilities live more independently.
- DRS Stepping Stones Program – A peer support group that offers practical daily living skills and empowers people to embrace disability and independence.
- DRS One-on-One Peer Support Programs – This program allows people with disabilities a safe place to get together to share their concerns and solve problems about everyday issues that affect their lives.
- DMH Drop-In Centers – These provide a safe haven location where individuals living with mental illness can meet in peer-facilitated groups

engaged in various activities with the goal of providing support, socialization and empowerment.

- DMH Assertive Community Treatment ("ACT") Programs – A very specialized model of treatment/service delivery in which a multi-disciplinary team assumes ultimate accountability for a small, defined caseload of seriously mentally ill adults. It is a unique treatment model in which the majority of mental health services are directly provided internally in the Class Member's regular environment. Class Members were absorbed into existing teams during the time period covered by this report. All billing was accomplished through MMIS. Hence, no costs are included for this program in this calculation.
- DMH Community Support Teams ("CST") – Provides rehabilitative and support necessary to assist Class Members in achieving rehabilitative, resiliency and recovery goals. Services consist of therapeutic interventions that facilitate illness self-management, skill building, identification and use of adaptive and compensatory strategies, identification and use of natural supports and use of community resources. Class Members develop and practice skills in their home and community. Class Members were absorbed into existing teams during the time period covered by this report. All billing was accomplished through MMIS. Hence, no costs are included for this program in this calculation.

Each of these programs was evaluated to develop an equitable means to calculate any incremental cost being incurred by the State of Illinois due to access and usage by transitioned Colbert Class Members. Due to our inability to capture actual access and usage for specific Class Members, once the total incremental cost was calculated, that total cost pool was allocated to all Colbert Class Members expected to be transitioned, regardless as to whether they used the services. See **Exhibit 7** for the PMPM cost analyses.

Claims Data Time Lag – There is a time lag between the date of service (the Service Date) and when claims are submitted for payment by providers. Once a claim is received by HFS, there is additional time required to process and finalize claims within the MMIS for payment (the Adjudication Date) and still more time required for actual disbursement to the provider (the Payment Date) in settlement of the claim. The MMIS data received by BRG from HFS provides all claims for Class Members that have been adjudicated – when the final amount for almost all claims to be paid is known.

In the past, claims data was being received from providers and processed in the MMIS long after the Service Date. In an attempt to shorten the length of time between Service Date and claims submission and in response to passage of the SMART Act by the Illinois General Assembly, HFS issued a Provider Notice dated July 23, 2012, to Participating Medical Assistance Providers requiring all claims to be received by the appropriate State of Illinois department no later than 180 days from the Service Date. There are some exceptions to this requirement, but generally all claims must meet this timeline in order to be adjudicated and approved for payment.

After discussion with the Cost Neutral Planning Group and conducting an analysis comparing the Service Date and Adjudication Date for all claims data for Class Members from 2010 through 2015 provided to BRG by HFS, BRG determined that approximately 95% of all claims are currently being adjudicated within the 180 day requirement. (See **Exhibit 8.**) We therefore concluded that we can expect at least 95% of all claims processed through the MMIS for transitions that occurred before July 1, 2014, are included in the December 31, 2015, data set we received for all Class Members. Our data indicates that 314 Class Members were transitioned before July 1, 2014, the eighteen months necessary for a 95% complete data set prior to the December 31, 2015, cutoff date.

The six month time frame for claim adjudication does not apply to service claims submitted and processed in PAAS or AIS as those claims are subject to tighter time requirements and are typically processed in much less time.

Cost Approaches Utilized – The ultimate objective of this report is to accumulate and compare the pretransition and post transition net annual cost to the State of Illinois for each transitioned Class Member. After much discussion, the Cost Neutral Planning Group determined that an incremental cost approach would be most appropriate for this comparison. There are many costs (administrative, clinical and other) being incurred by the State of Illinois in various departments that have a hand in managing and monitoring healthcare matters in the state. The workload for these staff members was assumed to be relatively unchanged since they are providing long term care services to the same caseload in different settings. These "costs" were therefore excluded from consideration of pretransition and post transition costs. However, with regard to IDoA's assumption of leadership, certain additional internal administrative staff was retained to handle Colbert specific tasks. These costs were identified and included in the allocation of administrative costs to transitioned Class Members as described above.

Additionally, as described above in **Section IV. Cost Data and Sources – Definition of Cost**, an adjustment is required to reflect the impact of inflation on the comparison of pretransition costs to post transition costs. BRG obtained the Consumer Price

Index – All Consumers data for "All Items" and "Medical Care" in the Chicago area to develop a blended average annual inflation factor of 1.5%. All post transaction costs were reduced by this 1.5% to remove any inflation influence on the cost comparison.

Program Transfer from HFS to IDoA – In early calendar year 2014, the State transferred leadership responsibility for implementing the Consent Decree from HFS to IDoA. After assuming control of the program, by July 1, 2014, IDoA either assumed or renegotiated the existing agreements with post transition service providers. Further, IDoA executed new agreements for the provision of potential additional services required by Class Members with Severe Mental Illness (SMI) with the goal of improving their eligibility and suitability for transition. Since the effective date of IDoA's assumption of control of this program coincided with the cutoff date of the transitioned Class Members studied in this document, it is possible, but not yet known, that the level of care required by future transitioned Class Members with SMI could impact the comparison of pretransition and post transition costs. The cost data will not be available for such a comparison for a year or more, and thus BRG cannot yet assess the possible impact of these changes.

Extrapolated Data – A preliminary review of the pretransition costs accumulated in MMIS for each transitioned Class Member revealed a number of occurrences where no costs were incurred by the State of Illinois in one or more months during the twelve months prior to transition. Since the Consent Decree allows for a comparison of annualized costs, and the State's payments to SNF's are relatively fixed for a particular patient, BRG inserted in those months with cost below $100 an estimated amount based upon the reported amounts for those RINs appearing in other months. Using this method, BRG adjusted the pretransition costs for 65 RINs by a combined total additional cost of $567,115.

Illinois Budget Stalemate – The State of Illinois has been operating without a fiscal budget since July 1, 2015. The lack of a budget has created some uncertainty as to the State's ability to continue funding various programs used by Class Members. The potential exists for a possible interruption or modification of the programs. BRG has made no attempt to measure the potential financial impact that any such changes might have to the services currently being provided to transitioned Class Members, their costs and staffing capabilities necessary to continue the transition of Class Members for the costs indicated in this report.

VI. Cost Comparison Results

Our data indicates that 1,112 Class Members were transitioned through December 31, 2015. Three hundred fourteen Class Members transitioned from the start of the project through June 30, 2014. Eliminating transitions for which there is no data or no reliable data for pretransition costs reduces the number of transitions in our final sample to 291. **Exhibit 9** is a list of these 291 transitioned Class Members with a comparison of all net costs to the State of Illinois pretransition and post transition. The pretransition SNF, clinical and pharmaceutical costs incurred by the State of Illinois for the twelve months prior to transition were obtained from MMIS and combined for each RIN. The costs for twelve months after Class Member transition were obtained from the sources identified in the Cost Data and Sources section above. The specific post transition cost categories appearing on the analysis are:

- MMIS Pharma – Prescription drug costs
- MMIS Service – Other clinical costs processed through MMIS
- PAAS/AIS 6 Month Bonus – Additional Success Fees paid to MCO's for transitioned Class Members 6 months after transition
- PAAS/AIS Assessments – MCO Class Member Assessment Fees
- PAAS/AIS Birth Certificates – The cost of obtaining a birth certificate was occasionally required for processing the Class Member's transition.
- CMHC – Community mental Health Center evaluation and transition costs
- HACC Debit – This category includes all costs associated with acquiring household needs including furniture, cooking and cleaning, etc.
- PAAS/AIS Housing Assistance – All net costs for rent subsidies required to secure housing.
- PAAS/AIS Housing Locator – Fees paid to housing assistance service providers for securing housing for transitioning Class Members
- PAAS/AIS On-Going Care – Fees paid to MCO's for the twelve months post transition
- PAAS/AIS Transitions – Transition Success Fees paid to MCO's

All of these costs were accumulated and, after adjusting for amortization of costs so identified, adding an equal allocation all non-RIN specific costs, reduction for any Federal Medicaid reimbursement and adding a factor for PMPM costs ($1,616.74 per transitioned Class Member), the total is compared to the net pretransition costs to determine the variance. A negative result represents a Class Member that costs the State of Illinois less after transition from the SNF.

In summary, for the 291 transitioned Class Members in our adjusted sample, their pretransition costs totaled $8,325,857 and their post transition costs totaled $5,203,911 representing a savings of $3,121,946, a 37.5% reduction in the aggregate.

Demographic Review

The MMIS data received from the State of Illinois included demographic information which allowed us to review and make some observations regarding the transitioned Class Members. A comparison of transitioned Class Members by race and gender to the entire Class indicates that, generally, transitioned Class Members are consistent with the entire Class with two exceptions. 38% of the 1,077 Class Members transitioned through December 31, 2015, are comprised of black males who represent 19% of the entire Class. Conversely, 13% of the same 1,077 Class Members are white females who represent 28% of the entire Class. See **Exhibit 10**.

Exhibit 10 also provides the average age for each Demographic Grouping for the total Class Members and transitioned Class Members. A comparison of the data indicates the age of transitioned Class Members is consistently lower than that of all Class Members by approximately 20 years. We find this data to be consistent with our expectation that older Class Members would be less willing and able to relocate and are more likely to be evaluated as clinically and functionally inappropriate for transition to a more independent living environment in Communities. See **Exhibit 10**.

An additional comparison of transitions by geographic location indicates that there is a higher concentration of transitions in the City of Chicago versus suburban Cook County. 33% of transitioned Class Members are located in the suburbs where 50% of the entire Class resides. Within the City of Chicago, a larger share of transitions are occurring in the Far North Side (26% versus 19% in the entire class) and South Side (13% versus 7% in the entire class). See **Exhibit 11.**

A review of the demographic and geographic data incorporating a comparison of the pretransition and post transition costs for each of the 291 transitioned Class Members indicates that (while the magnitude of the results vary) there are net savings within each demographic and geographic category. (See **Exhibit 12.**) Note that some of the categories contain a low number of transitioned members which could be impacting the significance of the results.

VII. Statistical Analysis

Our evaluation of the cost data included a statistical analysis that compares the pretransition and post transition cost of care for 291 transitioned Class Members. The data indicates that the average cost of pretransition care was $28,611 versus $17,883 for post transition care representing a decline of $10,728 or 37.5%. A similar comparison of the median pretransition and post transition costs indicated a 38.6% decline.

The data further indicates that a transitioning Class Member can be expected to generate savings to the State of Illinois approximately 83% of the time, and there is virtually a 100% likelihood that the next 291 transitioned Class Members will generate a net savings. See **Appendix A** to this report for a detailed discussion of our statistical review.

VIII. Conclusion

Our analysis of 291 transitioned Class Members reveals that there has been a significant financial benefit to the State of Illinois attributable to the net savings realized by Class Member transition from SNFs located in Cook County, Illinois, to a more community-based living environment. Additionally, a statistical review of the underlying financial data leads us to conclude that future additional Class Member transitions with similar demographics and level of care will generate similar results.

Respectfully Submitted By:

James E. Heenan

Michael W. Neupert

Stuart A. McCrary

EXHIBIT 1

Curriculum Vitae

Berkeley Research Group

JAMES E. HEENAN
BERKELEY RESEARCH GROUP, LLC
70 W. Madison, Suite 5000 | Chicago, Illinois 60602

Direct: 312.429.7919
Cell: 727.638.7640
jheenan@thinkbrg.com

BIO SUMMARY

Mr. Heenan is currently a Managing Director of Berkeley Research Group, LLC. He specializes in accounting, finance and insurance matters with companies in the healthcare industry on issues involving valuations, pricing disputes and damages calculations. Additionally, he has served as a consultant in the development of a new approach for a state funded long term care program in response to a class action lawsuit.

Specifically, he has been engaged on matters that include:

- Physician practice valuations
- Pricing disputes between payers and providers
- Analysis of hospital valuations
- Joint-venture financial transactions
- Class action settlements
- Testimony as an expert witness on accounting matters

Mr. Heenan's career began with positions in financial management with various companies and transitioned into consulting for eight years thereafter. During his consulting period, he became interested in the healthcare industry with emphasis on Long Term Care eventually joining one of his client companies in an equity ownership position. Goals were established and achieved and he sold his businesses in late 2007. In 2010, he joined Berkeley Research Group initially as an Affiliate and transitioned to Director.

Mr. Heenan possesses extensive knowledge of business records such as general ledgers, trial balances, balance sheets, income statements and statements of cash flow. He has reconciled financial balances to underlying supporting documentation. He has performed valuation services, cost allocation studies, tested the reasonableness of assumptions included in financial budgets and projections and has presented findings related to historical and expected future financial performance to board members and other interested parties.

During his career, he has been the accounting officer and CFO for two publicly traded companies. He has participated in initial public stock offerings, corporate strategic business development changes, financial turnarounds, acquisitions and new business development. He has helped raise capital funds for entities in multiple industries, prepared filings with the Securities and Exchange Commission and directed financial staffs.

Current Positions:
Managing Director of Berkeley Research Group, LLC
Managing Member of Brooksville Real Estate, LLC

PROFESSIONAL BACKGROUND

Healthcare (1998 – Present)

In 1998 Mr. Heenan joined Homestead Health Services, Inc. as Chief Financial Officer. The company owned and operated assisted living facilities (ALF's) in Florida. The company also managed ALF's and completed a number of financial turnarounds of troubled facilities. At its peak, Homestead owned and/or managed nine facilities with a combined total of over 1,200 licensed beds located in West Central Florida. The company also owned two Medicare Certified Home Health agencies which provided nursing care to residents within most of its ALF's. His responsibilities included financial accounting and cost reporting both internally and with regulatory agencies.

Soon after joining the company, the ALF industry began to decline in Florida while the home health industry became a more viable business. Mr. Heenan and his partner initiated a strategic shift of their business by divesting ALF properties and focusing on expanding their home health business.

In 2004 Homestead spun off its home health division and Mr. Heenan acquired one-third interest in the resulting entity, Quality of Life Holdings, Inc. Prior to its sale, the company owned and operated three Medicare Certified Home Health agencies serving approximately 700 patients in the Tampa Bay Florida region. The company provided health care services to elderly and disabled homebound persons and completed over 80,000 clinical visits per year. On October 26, 2007, the net assets of Quality of Life Holdings, Inc. were sold to Almost Family, Inc. in exchange for cash and stock.

In 2000 Mr. Heenan was asked to serve on the Board of Directors of Hernando Healthcare, Inc. (fka Atlantic Community Care, Inc.), a 501c3 Non-Profit Corporation. The company operated the Tangerine Cove assisted living facility located in Brooksville Florida and had a second ALF under construction in Fort Pierce Florida. Through a series of transactions initiated in 2005, Mr. Heenan and his partner formed Hernando Healthcare Limited Partnership which acquired the Tangerine Cove facility. The property was sold on November 30, 2007.

He joined Berkeley Research Group in April 2010 and currently serves as a Managing Director in the Health Analytics Division. He has been engaged in litigation matters involving accounting, valuation, payer/provider pricing disputes and general business consulting.

Consulting (1990 – 1998)

In 1990, Mr. Heenan joined Executive Portfolio, Inc., an investment banking and corporate financial consulting firm. Certain principals from Executive Portfolio, Inc and he formed Quantum Capital International, Inc. (QCI) in 1991. Clients included companies of various sizes in numerous industries where QCI negotiated capital funding commitments and strategic business alliances, coordinated a public stock offering, completed corporate financial restructurings and identified financing alternatives. The largest completed transaction secured a $20 million capital investment and strategic alliance for a start-up technology company.

During his tenure with QCI, Mr. Heenan was engaged to shepherd Just Like Home, Inc through an initial public stock offering (IPO). Just Like Home was a developer and operator of assisted living facilities in Florida in need of a financial manager with appropriate experience to manage the company through the stock offering process. Upon completion of the IPO, he served as the IPO Underwriter's representative on the Board of Directors of the newly-public entity in 1996 and 1997.

Financial Management (1975 – 1990)

Upon graduation from Chicago State University in 1975, Mr. Heenan joined the staff of Unity High School in Chicago as Treasurer. In 1977 he joined Wilton Enterprises, Inc., a $50 million consumer products company as a financial analyst and, over the years, was promoted to various positions including Corporate Controller. As Corporate Controller, he was responsible for all internal and external accounting and reporting including periodic reports filed with the Securities and Exchange Commission and coordination with an independent auditing firm. During his employment at Wilton, he assisted with the structuring of a leverage buyout of the company's assets from its Fortune 100 parent company. He coordinated the financial accounting and audit related activities relative to the acquisition of a competitor, Copco, Inc. and the completion of an initial public stock offering for the combined entities in 1981.

Mr. Heenan joined Allied International Holdings, Inc. in Florida as Vice President-Finance and Director in 1986. Allied is a holding company in the property and casualty insurance industry with subsidiaries that included a licensed and admitted P&C insurance carrier (T.H.E. Insurance Company), an insurance agency and an engineering affiliate. During his employment with Allied he assisted with the establishment of a start-up P&C Insurance Company and the process of its obtaining "licensed and admitted" status in forty-two states. His responsibilities included coordination with an independent auditing firm, actuaries and preparation and filing of periodic filings with the National Association of Insurance Commissioners.

EDUCATION

1975 B.S. in Finance (with Honors) from Chicago State University
1979 CPA Certificate issued by the Illinois State Board of Accountancy

BUSINESS AND NON-PROFIT AFFILIATIONS

Managing Member of Brooksville Real Estate, LLC
Director and Treasurer of Port Tierra Condominium Association

RECENT TESTIMONY EXPERIENCE

Case No. 07-0310JLR
Cell Therapeutics, Inc. v. The Lash Group, Inc., and Documedics Acquisition Co., Inc. Deposition Testimony - Damages verification in breach of contract dispute
May 10, 2011

AAA Case No. 13 193 0029012
Nassau Extended Care Center Corp., et al. v. Nassau Operating Co., LLC, et al.
Arbitration Testimony in a dispute regarding the nature and classification of post-closing liabilities
September 3, 2013

EXHIBIT 2

Curriculum Vitae

MICHAEL W. NEUPERT
BERKELEY RESEARCH GROUP, LLC
70 W. Madison, Suite 5000 | Chicago, Illinois 60602

Direct: 312.429.7916
Cell: 206.947.5000
mneupert@thinkbrg.com

SUMMARY

Michael W. Neupert is a Senior Managing Consultant with Berkeley Research Group, LLC and a member of the firm's healthcare, health insurance and pharmaceuticals practice. He provides detailed financial, economic and regulatory analysis for payors, providers and other health service organizations. His analysis gives clients insight into the myriad of complex rules and regulations governing the healthcare industry.

Mr. Neupert's experience includes both litigation support and complex management consulting services. Mr. Neupert is familiar with the nuances that exist between commercial insurance companies, government paid programs, and other payors. His engagements have required extensive research and knowledge of the Medicare Inpatient Prospective Payment System, Outpatient Prospective Payment System, Medicaid reimbursement systems and Workers' Compensation, among others. He is familiar with fee-for-service and managed care insurance products. His engagements have included researching other sources of revenues including Disproportionate Share Hospital payments and Delivery System Reform Incentive Payments, among others.

Mr. Neupert has been involved in matters regarding the billing and payment of healthcare services. He has assisted with the implementation of claims reviews that were designed using statistically valid approaches to sample design, sample selection and testing. These engagements have included the review and testing of both facility claims and physician claims. He has extensive experience in analyzing hospital charge description masters (CDMs), provider charge and cost structures, and the financial strengths and weaknesses of payors and providers.

Mr. Neupert has assisted in investigations related to allegations of healthcare fraud and abuse. He has analyzed claims to determine if services were rendered as billed, billed services were provided, claims were appropriately documented and claims were paid correctly. His investigation experience includes assisting in the audit of internal controls compliance related to Skilled Nursing Facilities and the review of rehabilitation documentation.

Mr. Neupert possesses extensive computer software knowledge. He is proficient with SQL, Access, Excel and other Microsoft products. He has designed detailed financial models databases, programs and protocols to assist with the identification of potential aberrant billing practices, the analysis of profits and losses and the valuation of services, compensation and organizations. The results of his efforts have provided clients with a detailed understanding of their financial conditions and operations.

Mr. Neupert's experience includes the valuation of services provided, physician compensation, medical office space lease agreements, capitated agreements, call coverage, and health service organizations.

He has experience utilizing numerous valuation methods including income based approaches, capitalization of earnings power, discounted future cash flows, market based approaches, comparable transaction, asset based approaches, among others. Mr. Neupert is familiar with the pertinent differences between the markets for closely held and publicly traded companies. As part of his valuation experience, Mr. Neupert has utilized multiple databases and industry data sources to analyze market conditions and identify market benchmarks.

Mr. Neupert has also assisted with the calculation of damages in conjunction with alleged breach of contract disputes, assisted with the development of methodologies to determine usual, customary and reasonable (UCR) rates of reimbursement and analyzed profitability related to hospitals, payors, and claims, among others. He has experience analyzing UCR rates paid to physicians, hospital, and other providers using various methodologies. Mr. Neupert's experience includes identifying benchmarks, reviewing reimbursement, and analyzing the profitability of claims paid based on UCR methodologies.

Mr. Neupert received his Bachelors of Business Administration with a concentration in Finance from the University of Notre Dame. He also received a certificate in Asia Pacific Studies from the University of Notre Dame Australia. Additionally, Mr. Neupert is a Certified Valuation Analyst (CVA).

EDUCATION

B.B.A. Finance	University of Notre Dame, 2007
	Certificate in Asia Pacific Studies

CERTIFICATIONS

Certified Valuation Analyst

EMPLOYMENT HISTORY

Berkeley Research Group, LLC
- Senior Managing Consultant, 2016 - Present
- Managing Consultant, 2014 - 2016
- Consultant, 2012 - 2014
- Senior Associate, 2010 - 2012

LECG, LLC
- Associate, 2009 - 2010

Resolution Economics, LLC
- Staff Consultant, 2008 - 2009

Huron Consulting Group
- Analyst, 2007 - 2008

RECENT TESTIMONY EXPERIENCE

Case No. 2013 CV 30161
John Haien v. St. Mary's Hospital & Medical Center
Deposition Testimony
August 6, 2014

PROFESSIONAL AFFILIATIONS

National Association of Certified Valuation Analysts

EXHIBIT 3

Curriculum Vitae

STUART A. MCCRARY, CFA
BERKELEY RESEARCH GROUP, LLC
70 West Madison, Suite 5000
Chicago, IL 60602

Direct: 312.429.7902
smccrary@thinkbrg.com

BIO SUMMARY

Stuart McCrary is a managing director in Berkeley Research Group's Chicago office. A trader and portfolio manager, he specializes in traditional and alternative investments, quantitative valuation, risk management, and financial software. Before joining BRG, he spent 13 years consulting on a variety of capital markets issues including litigation consulting, valuation, modeling, and risk management. Previously, he was president of Frontier Asset Management, managing a market-neutral hedge fund. He held positions with Fenchurch Capital Management as senior options trader and CS First Boston as vice president and market maker of over-the-counter options and mortgage-backed securities. Prior to that, he was a vice president with the Securities Groups and a portfolio manager with Comerica Bank.

PRESENT EMPLOYMENT

BERKELEY RESEARCH GROUP
Managing Director (2011–present)

PREVIOUS POSITIONS

- NAVIGANT ECONOMICS, FORMERLY CHICAGO PARTNERS
  Principal (1998–2011)

  Consulted on a variety of capital markets issues including litigation consulting, valuation, modeling and risk management. Specializes in options, mortgage-backed securities, derivatives, credit derivatives and hedge funds.

- FRONTIER ASSET MANAGEMENT
  President (1996–1999)

  Created, tested and implemented a long-term non-directional trading model for fixed income securities. Created and managed limited partnership and management company to execute investment plan. Ran portfolio, financed positions and maintained research database. Marketed the fund. Created records and reports for disclosure and regulatory supervision.

- NORTHWESTERN UNIVERSITY, McCormick School of Engineering and Applied Science
  Adjunct Faculty (2001–2014)

  Taught classes in accounting and finance to students in Master of Product Development.

- FENCHURCH CAPITAL MANAGEMENT

  Senior Options Trader (1990–1995)

  Managed hedged trading position including mortgage-backed securities, options and other derivatives. Traded and managed a large portfolio or exchange-traded and over-the-counter options. Directed options exercise, assignment, and margining of exchange-traded option. Directed a covered put and call write program versus firm-wide portfolio including domestic and foreign bonds, stock and currency. Developed all option valuation and hedging tools. Helped research department develop firm-wide risk management tools. Developed automated position auditing procedures.

- FIRST BOSTON CORPORATION

  Vice President, Mortgage Department and Proprietary Trading (1983–1990)

  Options market maker and position manager. Managed a large book of over-the-counter and exchange-traded options. Designed and created valuation and risk management systems for Taxable Fixed Income Department, including option trading, call-adjusted spread pricing, rate cap model, and hedging software. Consulted to Fixed Income Research on research reports and public software.

- THE SECURITIES GROUPS

  Vice President, Arbitrage Division (1980–1983)

  Managed a hedged portfolio of Treasury securities. Developed models for interest rates, risk management, capital utilization and decomposition of daily profit.

- COMERICA BANK

  Trust Investment Department (1979–1980)

  Trader, portfolio manager and credit analyst in the Trust Department. Designed and managed a bond immunization product.

PROFESSIONAL AFFILIATIONS

Chartered Financial Analyst (CFA), Charter holder
Trustee and President Pro Tempore, Village of Winnetka, Illinois (term expires May 2016)
Chartered Alternative Investment Analyst (CAIA) Program, Curriculum Committee
Institute for Global Asset and Risk Management, Research Associate

EDUCATION

NORTHWESTERN UNIVERSITY

MBA Finance and Economics, 1979
Graduated with Distinction (Top 10%)
Beta Gamma Sigma honorary business society

B.A. Economics, 1978
Dean's List
One of 12 students accepted into accelerated B.A./MBA program after junior year

SELECTED PUBLICATIONS

1. "A Look at a Defensive Equity Investment," Seeking Alpha, CFA Institute (2015).
2. *Implementing a Monte Carlo Simulation: Correlation, Skew, and Kurtosis*, BRG white paper (2015).
3. *Implementing a Trinomial Convertible Bond Pricing Model*, BRG white paper (2015).
4. *Implementing Hull-White Trinomial Term Structure Model*, BRG white paper (2015).
5. "Exploring Hedge Fund Transparency," *Westlaw Journal – Derivatives* 20:19 (2014).
6. "Financing Short Trading," in *Handbook of Short Selling*, Academic Press (2011).
7. *Essentials of Financial Accounting*, John Wiley and Sons (2010).
8. *Essentials of Corporate Finance*, John Wiley and Sons (2010).
9. *Hedge Fund Course*, John Wiley and Sons (2005).
10. *How to Create and Manage a Hedge Fund: A Professional's Guide*, John Wiley and Sons (2002).
11. "Mortgage Futures and Options: A Description of the CBOT MBS Contract," *Derivatives Quarterly* (Spring 2001).
12. "Option-like Structures in Hedge Funds", *Derivatives Quarterly* (Fall 1999).

SELECTED SPEECHES AND SEMINARS

1. "Credit Crisis: One Year Later," Northwestern University (February 19, 2010).
2. "Credit Crisis: Cause and Effect," Northwestern University (October 22, 2008, and January 31, 2009).
3. "Overview of Subprime Crisis and Structured Credit Products," McDermott, Will & Emery CLE (September 24, 2008); Winston & Strawn CLE (October 2, 2008); Sidley Austin CLE (November 18, 2008).
4. "Overview of Credit Crisis: What Now?" American Bar Association Section of Litigation (September 27, 2008).
5. "Mortgage-backed Securities and Subprime Mortgage Write-offs," DePaul Computational Finance Group, Featured Speaker Series (February 28, 2008).
6. "SEC Requirements for Hedge Funds and Related Challenges," Illinois CPA Society Special Interest Group for Futures, Securities and Derivatives (November 2, 2005).
7. "Financial Reporting and Risk Management Best Practices," Hedge Fund – Developing and Implementing Compliance Best Practices in the New Regulatory Environment, American Conference Institute (January 24–25, 2005).
8. "The Role of Alternative Investments in the Institutional Portfolio," Russell/Mellon Client Conference, Scottsdale, AZ (June 22–23, 2003).
9. "Big Picture Overview," Strategy Institute Conference on Creating and Marketing Hedge Funds, Toronto, Canada (January 21, 2003).

10. “Risk Budgeting,” Russell/Mellon Client Conference, Braselton, GA (February 26, 2002).
11. “Hedge Funds: Myth and Reality,” Alternative Investments Conference, Strategy Institute, Toronto, Canada (October 4, 2001).
12. “Hedge Funds in the Current Environment,” Seminar for the Investment Banking Group and Investment Management Group, University of Chicago (October 11, 2000).
13. “Hedge Fund Entrepreneurship,” Seminars in Applied Financial Theory, Masters of Science in Finance, DePaul University (May 26, 2000).
14. “Practical Aspects of Hedge Fund Management,” Symposium, Kellogg Graduate School of Management, Northwestern University (May 8, 2000).
15. National Futures Association Best Practices Study End-User Panel (December 1999–June 2000).
16. Risk Training, “Value at Risk for Investment Managers and Plan Sponsors”; Tutorial: “Mastering the theory for calculating value-at-risk” (November 18–19, 1999).

SELECTED TESTIMONY

1. Review of Securities and Exchange Commission software to audit trading blotters to identify transactions requiring closer review by SEC examiners. (not litigation)
2. Expert Report of Stuart A. McCrary in Lehman v. JPMorgan (September 2013, November 2013, and January 2014).
3. Expert Report of Stuart A. McCrary in Highland v UBS (April 2013).
4. In the Matter Involving the Illinois Funeral Directors Association and Merrill Lynch, Pierce, Fenner & Smith Incorporated with respect to the IFDA Tax-Exempt Pre-Need Trust Fund (April 2011, supplemented May 2011).
5. *David Dorman v Sysco Food Systems-Chicago, Inc. et al.* (November 2010).
6. *Regents Park et al. v. GlobeOp Financial Services* (June 2009).
7. *Miller Tabek & Co. v. Israel Englander & Co., Inc.* (October 2007).
8. *Josef A. Kohen, Breakwater Trading LLC, and Richard Hershey v. Pacific Investment Management Company LLC, and PIMCO Funds* (August 2007).
9. *Charles Schwab & Co., Inc. v. Carter, et al.* (January 2006).
10. *United States Securities and Exchange Commission v. National Presto Industries* (May–June, 2005).
11. *Jeffrey Saye v. Old Hill Partners, Inc.* (May 2004).
12. *Salomon Bros. Int’l Ltd. v. Eagle Cayman Int’l L.P., et al.* (May 2003).
13. *Hayden Leeson v. GHM, Inc. & J. Robbins* (May 2000).

EXHIBIT 4

Matrix of Transitioned Class Member Costs

										Cost Pools						
Service/Cost Pools by Category	**Consent Decree**	**Implementation Plan**	**Contracted Entity**	**Contract Period**	**IDoA Added to Existing Contract?**	**Funding Source**	**Medicaid Reimb? Y/N (If Y, what %)**	**Cost Info. Source**	**Financial Data Source**	**Grant - Not State Funded**	**Non-Recurring Startup Costs**	**Advance Payments / May be Allocated**	**Direct Assigned Costs**	**PMPM Components**	**Allocate to Transitioned Class Members?**	**Amortize Cost Pool? (# yrs.)**
Outreach and Education																
Educate class members, family members, general public, etc.	Sec. VII.	Sec. 4	City of Chicago Dept. of Family and Support Services (CDFSS)	5/23/13 to 5/31/14 plus one 12 mo. Extension and one 6 mo. Extension		GRF	100%	HFS Contract	PAAS GL System			427,445				
Educate class members, family members, general public, etc.	Sec. VII.	Sec. 5	City of Chicago Dept. of Family and Support Services (CDFSS)	7/1/14 to 6/30/16		GRF	100%	IDoA Contract	AIS GL System			342,000				
Educate class members, family members, general public, etc.	Sec. VII.	Sec. 4	Age Options	2/1/13 to 6/30/14 plus 12 mo. Extension	Yes	GRF	100%	HFS Contract	PAAS GL System			427,445				
Educate class members, family members, general public, etc.	Sec. VII.	Sec. 5	Age Options	7/1/14 to 6/30/16		GRF	100%	ADoA Contract	AIS GL System			553,000				
Video production for education effort	Sec. VII.	Sec. 5.6	University of Illinois - Springfield	NA		Grant from Chicago Community Trust	No	HFS Contract	PAAS GL System	13,000						
Printing of fact sheets, brochures, etc.	Sec. VII.	Sec. 5.3	State of IL DHS	NA		GRF	No		PAAS GL System	N/A						
Signage for placement in SNF's	Sec. VII.	Sec. 5.4	State of IL DHS	NA		GRF	No		PAAS GL System	N/A						
Medicaid Disbursements																
Medicaid Program Payments (incl. ICP-MCE program pmts.)	Sec. V. and VI. D.	Sec. 12.2.	Various	NA		GRF	50%	Claim Data Set	MMIS				N/A			
Care Coordination (MCO's)																
MCO Start-up costs	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	2/1/13 to 11/8/14 + two 12-mo. Renewals	Yes	GRF	No	HFS Contract	PAAS GL System		526,000					
MCO Start-up costs	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	2/1/13 to 11/8/14 + two 12-mo. Renewals		GRF	No	HFS Contract	PAAS GL System		213,104					
Class member evaluation	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	2/1/13 to 11/8/14 + two 12-mo. Renewals - 12/16/14 to 12/16/15 + up to 2 yr renewals	Yes	GRF	50%	HFS Contract	PAAS and AIS GL Systems					1,300 ea.	**Yes**	**10**
Class member evaluation	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	2/1/13 to 11/8/14 + two 12-mo. Renewals - 12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	HFS Contract	PAAS and AIS GL Systems					1,235 ea.	**Yes**	**10**
Successful transition of a class member (not from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	2/1/13 to 11/8/14 + two 12-mo. Renewals	Yes	GRF	50%	HFS Contract	PAAS and AIS GL Systems				8,400 ea.			**10**
MCE referral for transition of a class member (not from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				4,200 ea.			**10**
Successful transition of a class member (not from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				4,200 ea.			**10**
Successful transition of a class member (not from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	2/1/13 to 11/8/14 + two 12-mo. Renewals		GRF	50%	HFS Contract	PAAS and AIS GL Systems				7,656 ea.			**10**
MCE referral for transition of a class member (not from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				3,828 ea.			**10**
Successful transition of a class member (not from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				3,828 ea.			**10**
Successful transition of a class member (from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	2/1/13 to 11/8/14 + two 12-mo. Renewals	Yes	GRF	50%	HFS Contract	PAAS and AIS GL Systems				7,400 ea.			**10**
MCE referral for transition of a class member (from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				3,700 ea.			**10**
Successful transition of a class member (from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				3,700 ea.			**10**

Matrix of Transitioned Class Member Costs

Service/Cost Pools by Category	Consent Decree	Implementation Plan	Contracted Entity	Contract Period	IDoA Added to Existing Contract?	Funding Source	Medicaid Reimb? Y/N (If Y, what %)	Cost Info. Source	Financial Data Source	Cost Pools: Grant - Not State Funded	Cost Pools: Non-Recurring Startup Costs	Cost Pools: Advance Payments / May be Allocated	Cost Pools: Direct Assigned Costs	Cost Pools: PMPM Components	Allocate to Transitioned Class Members?	Amortize Cost Pool? (# yrs.)
Successful transition of a class member (from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	2/1/13 to 11/8/14 + two 12-mo. Renewals		GRF	50%	HFS Contract	PAAS and AIS GL Systems				6,656 ea.			10
MCE referral for transition of a class member (from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	HFS Contract	AIS GL System				3,328 ea.			10
Successful transition of a class member (from MCO's ICP)	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	IDoA Contract	AIS GL System				3,328 ea.			10
Class member maintained for 6 mo.	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	2/1/13 to 11/8/14 + two 12-mo. Renewals - 12/16/14 to 12/16/15 + up to 2 yr renewals	Yes	GRF	50%	IDoA Contract	PAAS and AIS GL Systems				1,500 ea.			10
Class member maintained for 6 mo.	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	2/1/13 to 11/8/14 + two 12-mo. Renewals - 12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	HFS Contract	PAAS and AIS GL Systems				1,500 ea.			10
First 12 mo. For class members not in MCO plan	Sec. VI	Sec. 6, 9,10, 11 & 12	AETNA Better Health Inc.	2/1/13 to 11/8/14 + two 12-mo. Renewals - 12/16/14 to 12/16/15 + up to 2 yr renewals	Yes	GRF	50%	HFS Contract	PAAS and AIS GL Systems				300/Mo for 12 mo.			10
First 12 mo. For class members not in MCO plan	Sec. VI	Sec. 6, 9,10, 11 & 12	Illinicare Health Plan	2/1/13 to 11/8/14 + two 12-mo. Renewals - 12/16/14 to 12/16/15 + up to 2 yr renewals		GRF	50%	HFS Contract	PAAS and AIS GL Systems				300/Mo for 12 mo.			10
Case Management for the period between MCO transition referral and class member actual transition			AETNA Better Health Inc.	12/16/14 to 12/16/15 plus up to two year renewals		GRF	50%	IDoA Contract	AIS GL System				$150/Mo.			

Housing Assistance

Service/Cost Pools by Category	Consent Decree	Implementation Plan	Contracted Entity	Contract Period	IDoA Added to Existing Contract?	Funding Source	Medicaid Reimb? Y/N (If Y, what %)	Cost Info. Source	Financial Data Source	Cost Pools: Grant - Not State Funded	Cost Pools: Non-Recurring Startup Costs	Cost Pools: Advance Payments / May be Allocated	Cost Pools: Direct Assigned Costs	Cost Pools: PMPM Components	Allocate to Transitioned Class Members?	Amortize Cost Pool? (# yrs.)
Housing Resource Specialists - Housing selection and transition services (SLF Transition)	Sec. IV, A, 34	Sec. 14.6. and 14.8.	Featherfist, Heartland Human Care Services, Inc. & Access Living	6/15/13 to 6/30/14 plus 12 month renewal amended 7/1/14	Yes	GRF	No	HFS Contract	PAAS GL System				1,183 ea.			
Housing Resource Specialists - Housing selection and transition services (**NON**-SLF Transition)	Sec. IV, A, 34	Sec. 14.6. and 14.8.	Featherfist, Heartland Human Care Services, Inc. & Access Living	6/15/13 to 6/30/14 plus 12 month renewal amended 7/1/14	Yes	GRF	No	HFS Contract	PAAS GL System				2,393 ea.			
Housing Resource Specialists - Housing selection and transition services (SLF Transition)	Sec. IV, A, 34	Sec. 14.6. and 14.8.	Featherfist, Heartland Human Care Services & Access Living	7/1/14 to 9/30/16 (renewals allowed, 10 yr cap		GRF	No	IDoA Contract	AIS GL System				1,200 ea.			
Housing Resource Specialists - Housing selection and transition services (**NON**-SLF Transition)	Sec. IV, A, 34	Sec. 14.6. and 14.8.	Access Living	7/1/14 to 9/30/16 (renewals allowed, 10 yr cap		GRF	No	IDoA Contract	AIS GL System				3,200 ea., 3,000 ea. or 2,800 ea. depending on timing of completion			
Housing Resource Specialists - Housing selection and transition services (**NON**-SLF Transition)	Sec. IV, A, 34	Sec. 14.6. and 14.8.	Featherfist & Heartland Human Care Services	7/1/14 to 9/30/16 (renewals allowed, 10 yr cap		GRF	No	IDoA Contract	AIS GL System				2,800 ea., 2,600 ea. or 2,400 ea. depending on timing of completion			
Fiscal Agent-Administration	Sec. IV, A, 16. and 34.	Sec. 14.9., 10. and 11.	Housing Authority of Cook County (HACC)	7/1/13 through 6/30/15 (plus 12 mo. At cost TBD)	Yes	GRF	No	HFS Contract	PAAS GL System			1,377,549			Yes	2
Fiscal Agent-Rent Subsidies	Sec. IV, A, 16. and 34.	Sec. 14.9., 10. and 11.	Housing Authority of Cook County (HACC)	7/1/13 through 6/30/15 (plus 12 mo. At cost TBD)	Yes	GRF	No	HFS Contract	PAAS GL System				6,010,000			

Matrix of Transitioned Class Member Costs

										Cost Pools						
Service/Cost Pools by Category	**Consent Decree**	**Implementation Plan**	**Contracted Entity**	**Contract Period**	**IDoA Added to Existing Contract?**	**Funding Source**	**Medicaid Reimb? Y/N (If Y, what %)**	**Cost Info. Source**	**Financial Data Source**	**Grant - Not State Funded**	**Non-Recurring Startup Costs**	**Advance Payments / May be Allocated**	**Direct Assigned Costs**	**PMPM Components**	**Allocate to Transitioned Class Members?**	**Amortize Cost Pool? (# yrs.)**
Fiscal Agent-Transition Costs	Sec. IV, A, 16. and 34.	Sec. 14.9., 10. and 11.	Housing Authority of Cook County (HACC)	7/1/13 through 6/30/15 (plus 12 mo. At cost TBD)	Yes	GRF	No	HFS Contract	PAAS GL System				3,200,000			
Home Modification Services (Assessment and production of specifications)	Sec. IV, A, 15.	Sec. 14.7	IUC Assistive Technology Unit	7/1/13 to 6/30/14 (plus 12 month renewal)	Yes	GRF	No	HFS Contract	PAAS GL System				550 ea.			**10**
Home Modification Services (Solicitation and bid review)	Sec. IV, A, 15.	Sec. 14.7	IUC Assistive Technology Unit	7/1/13 to 6/30/14 (plus 12 month renewal)	Yes	GRF	No	HFS Contract	PAAS GL System				150 ea.			**10**
Home Modification Services (Project mgmt and review)	Sec. IV, A, 15.	Sec. 14.7	IUC Assistive Technology Unit	7/1/13 to 6/30/14 (plus 12 month renewal)	Yes	GRF	No	HFS Contract	PAAS GL System				285 ea.			**10**
Home Modification Services (Contractor costs)	Sec. IV, A, 15.	Sec. 14.7	IUC Assistive Technology Unit	7/1/13 to 6/30/14 (plus 12 month renewal)	Yes	GRF	75%	HFS Contract	PAAS GL System				cap 4,015 ea.			**10**
State Funded Non-Medicaid Costs for Independence & Service Capacity Building																
Home Delivered Meals	Sec. V. and VI. D.	Sec. 12.2.				Area Agencies on Aging	No	P. Bennett Cost Analysis	DHS Data					3.14/meal	**Yes**	
Transportation (non-Medicaid)	Sec. V. and VI. D.	Sec. 12.2.				Various	No	Data Set	MMIS				N/A			
Information & Assistance	Sec. V. and VI. D.	Sec. 12.2.				Area Agencies on Aging	No	P. Bennett Cost Analysis	DHS Data					9.33/session	**Yes**	
DOR Independent Living Skills	Sec. V. and VI. D.	Sec. 12.2.				DHS and Ind. Living Ctrs.)	No	P. Bennett Cost Analysis	DHS Data					50/session	**Yes**	**10**
DOR Stepping Stones Program	Sec. V. and VI. D.	Sec. 12.2.				DHS and Ind. Living Ctrs.)	No	P. Bennett Cost Analysis	DHS Data					50/session	**Yes**	**10**
DOR One-on-One Peer Support	Sec. V. and VI. D.	Sec. 12.2.				DHS and Ind. Living Ctrs.)	No	P. Bennett Cost Analysis	DHS Data					65/session	**Yes**	**10**
DOMH Expansion of Assertive Community Treatment Program (ACT)	Sec. V. and VI. D.	Sec. 12.3.				GRF	50%	P. Bennett Cost Analysis	DOMH Data					667,000	**Yes**	**10**
DOMH Expansion of Community Support Teams (CST)	Sec. V. and VI. D.	Sec. 12.3.				GRF	50%	P. Bennett Cost Analysis	DOMH Data					337,000	**Yes**	**10**
DOMH Drop-in Centers	Sec. V. and VI. D.	Sec. 12.3.				GRF	No	P. Bennett Cost Analysis	DOMH Data					325,000	**Yes**	
Other/Admin																
Dedicated State Staff			State of IL DHS	NA		GRF	50%	TBD	PAAS/AIS GL Systems						**None**	
Court Monitor	Sec. IX		State of IL DHS	NA		GRF	50%	TBD	PAAS/AIS GL Systems						**No**	
Legal Fees			State of IL DHS	NA		GRF	No	TBD	PAAS/AIS GL Systems						**No**	

PAAS GL System = Programmatic Administrative Accounting System - The General Ledger accounting system used by the Illinois Department of Healthcare and Family Services (HFS).
AIS GL System = Accounting Information System - The General Ledger accounting system used by the Illnois Department on Aging (IDoA).

EXHIBIT 5

Analysis of Amortization Period

Average Age to SNF at Admission (A)	80
Average Age of Transitioned Colbert Class Members Through 9/30/15	55
Variance	25
Adjustment Factor (B)	40%
Colbert Matter Cost Amortization Period	10

NOTES:

(A) This is an estimated average based on national data obtained from various sources including the CMS 2013 Nursing Home Compendium, Center for Disease Control, Morningstar and others.

(B) This assumes a discount factor of 60% is being applied to reflect the assumption that transitioned Colbert Class Members will generally require greater assistance with ADL's sooner than the average SNF admission.

EXHIBIT 6

Allocation of Administrative Costs

	Total Cost Pool	Fiscal Years Ended June 30th FY12	FY13	FY14	FY15	Combined FY14 and FY15
Total Administration Costs (A)	3,895,046.75	31,522.00	163,116.46	418,280.66	3,282,127.63	3,700,408.29
Deduct Outreach & Education Costs 100% reimbursed	(632,799.84)	-	(40,695.48)	(198,001.63)	(394,102.73)	(592,104.36)
Deduct Excluded Court Monitor Costs	(404,703.93)	(31,522.00)	(117,868.54)	(123,152.21)	(132,161.18)	(255,313.39)
Net State Administration Costs Identified	2,857,542.98	-	4,552.44	97,126.82	2,755,863.72	2,852,990.54
100% Allocation to Twelve Months Post Transition Period	$741,649.68	$0.00	$4,552.44	$97,126.82	$639,970.42	$737,097.24
10% Allocation Giving Effect to 10 Yr. Amortization	$2,115,893.30	$0.00	$0.00	$0.00	$2,115,893.30	$2,115,893.30
Net State Administration Costs Allocable to Transitioned Class Members	$2,857,542.98	$0.00	$4,552.44	$97,126.82	$2,755,863.72	$2,852,990.54
Net Allocable to Post Transition Costs						
No Amortization	$741,649.68	$0.00	$4,552.44	$97,126.82	$639,970.42	$737,097.24
10 Year Amortization Amount	$211,589.33	$0.00	$0.00	$0.00	$211,589.33	$211,589.33
Total	$953,239.01	$0.00	$4,552.44	$97,126.82	$851,559.75	$948,686.57
Transitioned Class Members		0	19	295	522	817
Annual Cost Allocation to Transitioned Class Members			$239.60	$329.24	$1,631.34	$1,161.18

(A) Costs obtained from detailed spreadsheets provided by HFS and IDoA:
HFS PAAS System data from 2012 through 6/30/14
IDoA AIS System data from 7/1/14 to 3/31/15
IDoA AIS System data from 4/1/15 to 6/30/15

EXHIBIT 7

Analysis of Per Member Per Month Cost Allocation

	Per Member Costs		
	Annual	**Monthly**	**Note**
Combined DRS Programs	$498.38	$41.53	See DRS Programs Cost Calculation
Combined DMH Programs	$884.24	$73.69	See DMH Programs Cost Calculation
Other Programs	$234.13	$19.51	See Other Programs Cost Calculation
Total	$1,616.74	$134.73	

Analysis of Per Member Per Month Cost Allocation - Department of Rehabilitative Services Support Program Costs

Illinois Department of Rehabilitative Services (DRS) Programs
Independent Living Skills
Stepping Stones
One-on-One Peer Support Programs

Contract Period 7/1/12 to 6/30/13	**Annual Cost**	**PMPM**	**Data Source**
Total Budgeted Costs	$338,000.00		1
Unspent Budget	($25,018.89)		1
Net Program Expenditures FYE 6/30/13	$312,981.11		1
Deduct Medicaid Federal Matching Funds (50%)	($156,490.56)		
Net State Costs for FYE 6/30/13	$156,490.56		
Colbert Class Transitions and Average Cost:			
Through 6/30/13	19		2
Average Annual Cost per Transitioned Class Member	$8,236.35	$686.36	
Transitions Goal	100		3
Average Annual Cost per Assumed Transitioned Class Members	$1,564.91	$130.41	
Transitions 7/1/13 through 6/30/14	314		2
Average Annual Cost per Assumed Transitioned Class Members	**$498.38**	**$41.53**	
Transitions 7/1/14 through 6/30/15	520		2
Average Annual Cost per Assumed Transitioned Class Members	$300.94	$25.08	
Total Planned Transitions	1,100		
Average Annual Cost per Planned Transition	$142.26	$11.86	

Data Sources:
(1) Access Living Final Reconciliation Report - Contract #46CRD00086
(2) BRG Data Set - Colbert Transitions by Month
(3) 2015 Community Services Agreement Writeup Provided by DRS

Analysis of Per Member Per Month Cost Allocation - Department of Mental Health Programs

Illinois Department of Human Services - Department of Mental Health (DMH)
Drop-in Centers
Assertive Community Treatment (ACT) Program (Initiated after 6/30/15)
Community Support Teams (CST) Program (Initiated after 6/30/15)

	Drop-In Centers
Average Annual Operating Cost per Participating Class Member (1)	$5,553.00
Estimated Participating Class Members (2)	100
Estimated Total Annual Operating Cost	$555,300.00
Less Federal Medicaid Reimbursement (50%)	-$277,650.00
Net Estimated Cost to the State of Illinois	$277,650.00
Assumed Total Transitioned Class Members	314
Allocated Cost	$884.24
PMPM	$73.69

Data Sources:

(1) Average cost obtained from Department of Human Services Division of Mental Health
(2) Estimated Colbert program participants from discussions with IDoA

Analysis of Per Member Per Month Cost Allocation - Other Programs

Illinois Department on Aging (IDoA)
Home Delivered Meals Program
Transportation Program - COST DATA INCLUDED ON MMIS
Information & Assistance Program

	Home Delivered Meals	Info & Assistance	Combined
Cost per Unit of Service (1)	$8.78	$6.95	
Estimated Class Member Utilization:			
Service Period (Daily, Weekly, Monthly, Annual)	Monthly	Monthly	
Quantity of Services per Service Period (2)	40	1	
Estimated Annual Service Events per Participating Class Member	480	12	
Total Estimated Annual Costs	$4,214.40	$83.40	
Deduct Estimated Medicaid Federal Match (Meals = 50%, I&A = 30%) (1)	($2,107.20)	($25.02)	
Net Estimated Annual Cost to the State of Illinois	$2,107.20	$58.38	
Estimated % Transitioned Class Member Participation (3)	11%	4%	
Transitioned Class Members Through 6/30/14	314	314	
Estimated Quantity of Participating Class Members	34.54	12.56	
Total Estimated Annual Cost	$72,782.69	$733.25	
Allocated Estimated Annual Cost per Class Member	$231.79	$2.34	**$234.13**
Allocated Estimated PMPM	$19.32	$0.19	**$19.51**

Data Sources:
(1) Data obtained from Age Options
(2) Usage data obtained from original estimates provided by HFS

EXHIBIT 8

Review of Claim Adjudication Time Period

		Cumulative Dollar Value of Claims		Months to Adjudication	
Year	**Cumulative Percentage of Dollars Adjudicated**	**Pharmaceutical**	**Main Service**	**Pharmaceutical**	**Main Service**
2010	95.0%	$33,714,311	$736,966,769	4.07	5.20
	95.9%		$743,588,448		6.00
	98.3%	$34,886,850		6.00	
	100.0%	$35,492,820	$775,378,297	42.23	53.13
2011	91.4%		$770,291,199		6.00
	95.0%		$800,835,322		8.20
	95.6%	$32,064,599		4.03	
	98.2%	$32,949,199		6.00	
	100.0%	$33,543,034	$842,682,807	41.33	44.40
2012	91.2%		$775,205,936		6.00
	95.1%	$17,207,945	$808,241,445	3.07	8.67
	98.2%	$17,769,853		6.00	
	100.0%	$18,091,698	$850,141,845	25.50	33.50
2013	93.1%		$748,821,696		6.00
	95.0%	$14,192,185	$764,760,917	2.30	8.10
	98.3%	$14,689,136		6.00	
	100.0%	$14,938,470	$804,608,267	25.47	27.80
2014	94.5%		$819,481,384		6.00
	95.0%	$9,090,043	$823,759,959	2.00	6.50
	98.9%	$9,468,284		6.00	
	100.0%	$9,570,180	$866,879,439	24.03	24.00
2015	95.2%	$4,664,867	$730,755,920	1.67	2.87
	99.2%		$761,585,096		6.00
	99.9%	$4,894,140		6.00	
	100.0%	$4,900,261	$767,953,997	11.93	12.13

Note: 2015 includes incomplete data as it excludes claims received after 12/31/15 cutoff.

EXHIBIT 9

Analysis of Transitioned Class Member Costs
(Including Extrapolation of Pretransition Costs)

RIN (Deleted)	Transition Date	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference	Count
	5/29/2014	$37,580.10	$4,363.71	$33,216.38	-88.4%	1
	6/10/2014	$56,695.45	$7,361.57	$49,333.88	-87.0%	2
	5/7/2013	$32,023.91	$4,344.70	$27,679.22	-86.4%	3
	10/30/2013	$48,030.21	$8,352.21	$39,677.99	-82.6%	4
	6/19/2013	$33,428.19	$5,829.09	$27,599.09	-82.6%	5
	8/26/2013	$33,673.68	$6,201.83	$27,471.85	-81.6%	6
	4/5/2013	$26,678.09	$5,100.14	$21,577.95	-80.9%	7
	4/9/2013	$34,326.07	$6,912.05	$27,414.02	-79.9%	8
	3/31/2014	$38,126.32	$7,761.20	$30,365.12	-79.6%	9
	6/15/2014	$24,289.46	$5,343.26	$18,946.20	-78.0%	10
	6/24/2014	$45,739.61	$10,082.69	$35,656.92	-78.0%	11
	4/15/2014	$27,314.64	$6,163.63	$21,151.00	-77.4%	12
	4/19/2013	$37,289.81	$8,683.25	$28,606.56	-76.7%	13
	6/20/2013	$29,609.47	$6,966.40	$22,643.07	-76.5%	14
	4/10/2014	$21,492.69	$5,156.77	$16,335.93	-76.0%	15
	4/15/2013	$22,922.85	$5,567.93	$17,354.92	-75.7%	16
	8/8/2013	$22,112.79	$5,547.80	$16,564.99	-74.9%	17
	6/28/2013	$36,318.25	$9,164.39	$27,153.86	-74.8%	18
	5/22/2013	$38,462.68	$9,837.58	$28,625.09	-74.4%	19
	3/31/2014	$21,400.69	$5,554.54	$15,846.15	-74.0%	20
	4/2/2014	$40,753.13	$10,821.86	$29,931.27	-73.4%	21
	12/9/2013	$35,425.34	$9,450.69	$25,974.65	-73.3%	22
	2/28/2014	$20,701.16	$5,528.00	$15,173.16	-73.3%	23
	9/18/2013	$21,691.03	$5,897.72	$15,793.30	-72.8%	24
	12/9/2013	$35,425.34	$9,686.40	$25,738.94	-72.7%	25
	5/29/2014	$30,242.36	$8,368.06	$21,874.30	-72.3%	26
	12/17/2013	$35,590.81	$10,028.96	$25,561.85	-71.8%	27
	11/25/2013	$35,479.16	$9,998.60	$25,480.56	-71.8%	28
	6/15/2014	$80,692.78	$22,802.54	$57,890.24	-71.7%	29
	9/18/2013	$36,600.97	$10,499.85	$26,101.12	-71.3%	30
	11/20/2013	$34,565.42	$9,976.98	$24,588.44	-71.1%	31
	3/7/2014	$21,458.43	$6,347.10	$15,111.33	-70.4%	32
	6/27/2013	$34,891.76	$10,325.84	$24,565.92	-70.4%	33
	6/5/2013	$25,869.63	$7,761.81	$18,107.82	-70.0%	34
	2/18/2014	$32,652.24	$9,833.52	$22,818.72	-69.9%	35
	4/15/2014	$33,063.24	$10,053.21	$23,010.03	-69.6%	36
	3/5/2014	$32,916.59	$10,149.90	$22,766.69	-69.2%	37
	1/31/2014	$34,816.65	$10,849.84	$23,966.80	-68.8%	38
	3/31/2014	$32,984.79	$10,301.85	$22,682.94	-68.8%	39
	3/20/2014	$32,520.23	$10,204.78	$22,315.44	-68.6%	40
	6/30/2014	$33,363.87	$10,553.54	$22,810.33	-68.4%	41
	8/9/2013	$17,130.32	$5,560.80	$11,569.51	-67.5%	42
	6/15/2014	$30,291.18	$9,912.81	$20,378.37	-67.3%	43
	4/30/2014	$32,853.02	$10,848.55	$22,004.46	-67.0%	44
	2/20/2014	$32,652.24	$10,850.14	$21,802.10	-66.8%	45
	4/28/2014	$33,063.24	$11,031.80	$22,031.44	-66.6%	46
	1/9/2014	$33,140.64	$11,073.29	$22,067.35	-66.6%	47
	5/29/2014	$33,343.10	$11,194.60	$22,148.51	-66.4%	48
	4/30/2014	$21,123.79	$7,142.92	$13,980.87	-66.2%	49
	2/10/2014	$17,843.57	$6,207.08	$11,636.49	-65.2%	50
	6/30/2014	$32,749.44	$11,467.61	$21,281.83	-65.0%	51
	4/8/2014	$22,988.70	$8,118.49	$14,870.21	-64.7%	52
	6/11/2013	$35,021.58	$12,701.52	$22,320.06	-63.7%	53
	3/6/2014	$28,640.42	$10,457.60	$18,182.81	-63.5%	54
	4/9/2014	$32,768.82	$11,976.17	$20,792.65	-63.5%	55
	2/27/2014	$32,652.24	$12,140.22	$20,512.02	-62.8%	56
	2/25/2014	$25,107.55	$9,477.24	$15,630.30	-62.3%	57
	6/12/2014	$19,262.11	$7,273.86	$11,988.25	-62.2%	58
	4/28/2014	$26,393.16	$10,011.01	$16,382.15	-62.1%	59
	4/22/2014	$31,086.50	$11,905.26	$19,181.24	-61.7%	60
	5/20/2014	$36,576.96	$14,197.92	$22,379.04	-61.2%	61
	4/24/2014	$35,132.10	$13,788.88	$21,343.22	-60.8%	62
	5/3/2013	$23,159.28	$9,145.02	$14,014.26	-60.5%	63
	5/31/2013	$27,983.30	$11,052.07	$16,931.22	-60.5%	64
	3/6/2014	$27,432.87	$10,847.45	$16,585.42	-60.5%	65
	11/21/2013	$44,271.73	$17,631.91	$26,639.82	-60.2%	66
	4/30/2014	$35,616.13	$14,226.59	$21,389.55	-60.1%	67
	5/21/2014	$31,104.00	$12,709.21	$18,394.79	-59.1%	68
	11/25/2013	$23,067.02	$9,536.95	$13,530.07	-58.7%	69
	6/17/2013	$95,951.81	$40,470.40	$55,481.41	-57.8%	70
	9/13/2013	$43,291.37	$18,297.81	$24,993.56	-57.7%	71
	9/20/2013	$21,550.05	$9,265.31	$12,284.73	-57.0%	72
	11/20/2013	$27,598.53	$11,877.66	$15,720.87	-57.0%	73
	7/9/2013	$29,264.25	$12,599.73	$16,664.52	-56.9%	74
	6/15/2014	$33,716.37	$14,859.23	$18,857.14	-55.9%	75

Analysis of Transitioned Class Member Costs
(Including Extrapolation of Pretransition Costs)

RIN (Deleted)	Transition Date	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference	Count
	4/30/2014	$34,089.30	$15,073.44	$19,015.86	-55.8%	76
	12/12/2013	$25,972.92	$11,542.23	$14,430.69	-55.6%	77
	4/13/2014	$19,251.02	$8,628.45	$10,622.57	-55.2%	78
	9/20/2013	$24,688.85	$11,317.01	$13,371.84	-54.2%	79
	4/2/2014	$14,571.57	$6,711.43	$7,860.14	-53.9%	80
	6/30/2014	$29,497.62	$13,815.36	$15,682.25	-53.2%	81
	9/18/2013	$21,849.62	$10,338.16	$11,511.46	-52.7%	82
	10/31/2013	$30,509.67	$14,447.21	$16,062.46	-52.6%	83
	11/25/2013	$35,398.01	$16,827.40	$18,570.61	-52.5%	84
	11/26/2013	$57,489.02	$27,359.56	$30,129.46	-52.4%	85
	11/18/2013	$34,880.05	$16,617.32	$18,262.73	-52.4%	86
	4/17/2014	$40,062.86	$19,145.99	$20,916.86	-52.2%	87
	3/25/2014	$32,752.63	$15,698.94	$17,053.69	-52.1%	88
	5/8/2014	$32,194.74	$15,459.11	$16,735.63	-52.0%	89
	4/17/2014	$21,310.58	$10,445.09	$10,865.49	-51.0%	90
	10/15/2013	$23,940.39	$11,746.69	$12,193.70	-50.9%	91
	11/21/2013	$28,215.61	$13,947.01	$14,268.59	-50.6%	92
	11/27/2013	$16,523.27	$8,211.04	$8,312.23	-50.3%	93
	10/1/2013	$25,392.39	$12,629.78	$12,762.61	-50.3%	94
	6/17/2013	$33,240.38	$16,702.32	$16,538.06	-49.8%	95
	3/19/2014	$26,792.46	$13,502.89	$13,289.57	-49.6%	96
	10/24/2013	$24,865.62	$12,554.91	$12,310.71	-49.5%	97
	10/31/2013	$34,402.65	$17,374.69	$17,027.96	-49.5%	98
	2/14/2014	$32,652.24	$16,585.81	$16,066.43	-49.2%	99
	11/13/2013	$35,006.33	$17,880.06	$17,126.27	-48.9%	100
	6/30/2014	$37,010.66	$18,980.41	$18,030.25	-48.7%	101
	8/2/2013	$56,851.07	$29,237.40	$27,613.67	-48.6%	102
	2/18/2014	$19,442.73	$10,131.20	$9,311.53	-47.9%	103
	5/20/2014	$33,193.45	$17,308.94	$15,884.51	-47.9%	104
	3/13/2014	$33,027.47	$17,255.05	$15,772.41	-47.8%	105
	5/28/2014	$31,927.88	$16,812.55	$15,115.33	-47.3%	106
	6/5/2014	$32,885.40	$17,335.66	$15,549.74	-47.3%	107
	5/14/2014	$24,443.43	$12,921.63	$11,521.80	-47.1%	108
	1/23/2014	$34,504.53	$18,267.71	$16,236.81	-47.1%	109
	4/23/2014	$29,258.30	$15,556.48	$13,701.81	-46.8%	110
	2/25/2014	$31,261.71	$16,752.71	$14,508.99	-46.4%	111
	12/9/2013	$13,275.91	$7,129.91	$6,146.00	-46.3%	112
	6/30/2014	$32,328.37	$17,437.64	$14,890.73	-46.1%	113
	1/29/2014	$30,790.10	$16,640.99	$14,149.11	-46.0%	114
	6/17/2014	$29,641.91	$16,032.69	$13,609.22	-45.9%	115
	6/5/2014	$26,402.11	$14,318.47	$12,083.64	-45.8%	116
	6/16/2014	$68,157.77	$37,520.38	$30,637.39	-45.0%	117
	4/26/2013	$35,191.76	$19,531.72	$15,660.03	-44.5%	118
	4/29/2014	$22,802.72	$12,680.66	$10,122.06	-44.4%	119
	4/17/2014	$32,768.82	$18,493.30	$14,275.52	-43.6%	120
	10/28/2013	$34,632.91	$19,614.22	$15,018.68	-43.4%	121
	6/24/2014	$33,136.99	$18,771.78	$14,365.20	-43.4%	122
	6/30/2014	$32,271.87	$18,298.64	$13,973.23	-43.3%	123
	10/8/2013	$28,357.25	$16,107.91	$12,249.34	-43.2%	124
	11/14/2013	$26,731.90	$15,212.02	$11,519.88	-43.1%	125
	1/22/2014	$26,153.83	$14,977.69	$11,176.14	-42.7%	126
	4/28/2014	$38,921.08	$22,320.22	$16,600.85	-42.7%	127
	5/1/2014	$20,109.62	$11,597.77	$8,511.85	-42.3%	128
	5/30/2014	$33,502.69	$19,701.64	$13,801.05	-41.2%	129
	4/24/2014	$33,665.09	$19,974.54	$13,690.55	-40.7%	130
	4/22/2014	$33,146.44	$19,724.78	$13,421.65	-40.5%	131
	1/15/2014	$29,919.81	$17,900.62	$12,019.19	-40.2%	132
	6/7/2013	$76,526.43	$45,834.64	$30,691.79	-40.1%	133
	7/25/2013	$40,808.27	$24,447.59	$16,360.68	-40.1%	134
	2/12/2014	$20,584.23	$12,346.93	$8,237.29	-40.0%	135
	4/10/2014	$19,333.22	$11,629.99	$7,703.23	-39.8%	136
	12/23/2013	$27,584.23	$16,597.52	$10,986.71	-39.8%	137
	3/7/2014	$33,275.17	$20,032.94	$13,242.23	-39.8%	138
	4/30/2014	$54,653.53	$32,972.14	$21,681.39	-39.7%	139
	5/3/2013	$17,519.36	$10,573.18	$6,946.18	-39.6%	140
	5/29/2014	$32,999.60	$19,963.78	$13,035.81	-39.5%	141
	3/31/2014	$30,252.37	$18,309.79	$11,942.58	-39.5%	142
	5/27/2014	$45,700.55	$27,727.02	$17,973.53	-39.3%	143
	9/26/2013	$22,251.50	$13,509.38	$8,742.12	-39.3%	144
	5/22/2014	$28,355.10	$17,232.51	$11,122.60	-39.2%	145
	12/2/2013	$25,541.08	$15,522.54	$10,018.54	-39.2%	146
	1/16/2014	$21,234.02	$12,991.75	$8,242.27	-38.8%	147
	8/6/2013	$29,729.35	$18,231.40	$11,497.94	-38.7%	148
	4/1/2014	$19,247.99	$11,814.25	$7,433.74	-38.6%	149
	1/14/2014	$35,539.09	$21,918.40	$13,620.68	-38.3%	150

Analysis of Transitioned Class Member Costs
(Including Extrapolation of Pretransition Costs)

RIN (Deleted)	Transition Date	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference	Count
	3/18/2014	$34,597.31	$21,374.83	$13,222.48	-38.2%	151
	9/23/2013	$23,086.61	$14,456.61	$8,630.00	-37.4%	152
	2/26/2014	$25,404.31	$16,012.14	$9,392.17	-37.0%	153
	5/28/2014	$28,439.94	$18,065.87	$10,374.06	-36.5%	154
	1/22/2014	$34,820.79	$22,246.91	$12,573.88	-36.1%	155
	5/19/2014	$28,651.00	$18,348.29	$10,302.71	-36.0%	156
	4/17/2014	$25,773.22	$16,527.93	$9,245.29	-35.9%	157
	2/26/2014	$27,902.41	$17,967.67	$9,934.74	-35.6%	158
	2/27/2014	$21,094.05	$13,630.19	$7,463.87	-35.4%	159
	4/16/2014	$26,901.70	$17,403.18	$9,498.52	-35.3%	160
	10/31/2013	$27,533.06	$17,814.35	$9,718.71	-35.3%	161
	3/31/2014	$23,549.65	$15,260.71	$8,288.93	-35.2%	162
	2/6/2014	$49,317.01	$32,013.18	$17,303.82	-35.1%	163
	12/4/2013	$31,688.05	$20,582.67	$11,105.38	-35.0%	164
	12/2/2013	$35,278.71	$23,201.93	$12,076.78	-34.2%	165
	6/30/2014	$25,059.24	$16,503.53	$8,555.72	-34.1%	166
	11/26/2013	$17,911.17	$11,803.78	$6,107.39	-34.1%	167
	6/15/2014	$33,710.16	$22,319.10	$11,391.06	-33.8%	168
	12/3/2013	$35,519.41	$23,614.47	$11,904.93	-33.5%	169
	6/28/2013	$29,669.05	$19,745.38	$9,923.67	-33.4%	170
	11/22/2013	$20,844.57	$13,905.06	$6,939.51	-33.3%	171
	5/20/2014	$25,352.37	$16,953.29	$8,399.07	-33.1%	172
	2/20/2014	$32,597.96	$22,014.29	$10,583.67	-32.5%	173
	4/18/2014	$32,853.02	$22,279.05	$10,573.97	-32.2%	174
	4/8/2014	$21,769.24	$14,791.10	$6,978.13	-32.1%	175
	2/19/2014	$26,844.02	$18,325.44	$8,518.58	-31.7%	176
	11/25/2013	$33,987.30	$23,560.37	$10,426.92	-30.7%	177
	4/30/2014	$37,896.58	$26,568.70	$11,327.87	-29.9%	178
	5/8/2014	$27,696.08	$19,752.01	$7,944.07	-28.7%	179
	1/13/2014	$23,897.35	$17,270.46	$6,626.89	-27.7%	180
	5/11/2014	$23,365.46	$16,908.93	$6,456.52	-27.6%	181
	10/8/2013	$24,388.97	$17,666.56	$6,722.41	-27.6%	182
	5/11/2014	$33,861.16	$24,593.68	$9,267.48	-27.4%	183
	3/6/2014	$31,075.17	$22,576.01	$8,499.16	-27.4%	184
	4/16/2014	$29,237.19	$21,256.83	$7,980.36	-27.3%	185
	4/24/2014	$34,321.07	$25,011.52	$9,309.54	-27.1%	186
	6/30/2014	$24,477.97	$17,855.37	$6,622.60	-27.1%	187
	4/30/2014	$15,765.62	$11,527.52	$4,238.11	-26.9%	188
	12/17/2013	$20,056.66	$14,691.88	$5,364.77	-26.7%	189
	8/19/2013	$26,532.57	$19,458.99	$7,073.58	-26.7%	190
	3/27/2014	$32,710.53	$24,194.77	$8,515.76	-26.0%	191
	5/22/2014	$26,060.61	$19,384.79	$6,675.81	-25.6%	192
	1/14/2014	$25,693.85	$19,177.93	$6,515.92	-25.4%	193
	5/21/2014	$22,638.38	$17,136.81	$5,501.57	-24.3%	194
	2/20/2014	$29,337.55	$22,368.03	$6,969.52	-23.8%	195
	10/15/2013	$18,122.00	$13,842.02	$4,279.97	-23.6%	196
	3/31/2014	$28,180.62	$21,726.49	$6,454.13	-22.9%	197
	7/31/2013	$25,141.31	$19,418.46	$5,722.85	-22.8%	198
	6/30/2014	$26,013.04	$20,100.59	$5,912.44	-22.7%	199
	9/3/2013	$30,858.53	$23,950.96	$6,907.57	-22.4%	200
	1/14/2014	$21,755.11	$16,980.40	$4,774.71	-21.9%	201
	2/18/2014	$26,649.96	$20,850.68	$5,799.28	-21.8%	202
	9/18/2013	$23,004.92	$17,999.55	$5,005.37	-21.8%	203
	3/11/2014	$26,204.57	$20,557.70	$5,646.87	-21.5%	204
	1/29/2014	$36,197.72	$28,452.97	$7,744.75	-21.4%	205
	2/19/2014	$16,223.04	$12,772.75	$3,450.29	-21.3%	206
	3/20/2014	$21,538.94	$16,971.47	$4,567.46	-21.2%	207
	8/7/2013	$20,086.70	$15,867.23	$4,219.47	-21.0%	208
	4/9/2014	$34,171.19	$27,069.50	$7,101.69	-20.8%	209
	4/15/2014	$33,335.06	$26,504.02	$6,831.04	-20.5%	210
	5/20/2014	$26,736.96	$21,284.20	$5,452.76	-20.4%	211
	8/23/2013	$25,890.97	$20,794.86	$5,096.11	-19.7%	212
	3/27/2014	$22,061.93	$17,890.33	$4,171.59	-18.9%	213
	9/1/2013	$17,982.70	$14,633.31	$3,349.39	-18.6%	214
	9/30/2013	$25,188.12	$20,507.49	$4,680.63	-18.6%	215
	10/28/2013	$20,941.67	$17,083.81	$3,857.86	-18.4%	216
	2/27/2014	$19,945.76	$16,277.97	$3,667.78	-18.4%	217
	7/31/2013	$21,518.72	$17,592.99	$3,925.72	-18.2%	218
	6/15/2014	$31,613.54	$25,879.33	$5,734.21	-18.1%	219
	1/30/2014	$19,987.44	$16,370.44	$3,617.00	-18.1%	220
	3/27/2014	$20,044.91	$16,443.73	$3,601.18	-18.0%	221
	8/13/2013	$22,422.80	$18,561.59	$3,861.20	-17.2%	222
	2/13/2014	$26,021.09	$21,639.68	$4,381.40	-16.8%	223
	7/31/2013	$22,677.21	$18,917.03	$3,760.18	-16.6%	224
	2/6/2014	$30,237.09	$25,295.02	$4,942.06	-16.3%	225

Analysis of Transitioned Class Member Costs
(Including Extrapolation of Pretransition Costs)

RIN (Deleted)	Transition Date	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference	Count
	2/25/2014	$28,033.53	$23,512.58	$4,520.95	-16.1%	226
	3/31/2014	$27,054.37	$22,709.26	$4,345.11	-16.1%	227
	12/16/2013	$22,480.57	$19,113.13	$3,367.43	-15.0%	228
	5/14/2014	$31,360.50	$26,718.96	$4,641.53	-14.8%	229
	5/27/2014	$20,839.49	$17,783.20	$3,056.29	-14.7%	230
	6/30/2014	$18,031.55	$15,388.82	$2,642.73	-14.7%	231
	2/28/2014	$19,595.33	$16,738.61	$2,856.72	-14.6%	232
	6/3/2014	$20,744.18	$17,757.03	$2,987.14	-14.4%	233
	5/21/2014	$26,893.08	$23,095.43	$3,797.65	-14.1%	234
	5/29/2014	$19,962.16	$17,321.81	$2,640.35	-13.2%	235
	6/25/2014	$33,220.14	$28,860.88	$4,359.26	-13.1%	236
	5/30/2014	$33,076.22	$29,020.27	$4,055.94	-12.3%	237
	4/10/2014	$21,746.96	$19,262.43	$2,484.53	-11.4%	238
	12/11/2013	$18,843.95	$16,692.24	$2,151.71	-11.4%	239
	5/13/2014	$18,494.58	$16,392.18	$2,102.40	-11.4%	240
	12/12/2013	$24,469.31	$21,755.85	$2,713.46	-11.1%	241
	5/22/2014	$28,891.38	$25,713.61	$3,177.77	-11.0%	242
	11/5/2013	$27,814.95	$24,986.96	$2,827.99	-10.2%	243
	12/27/2013	$31,949.43	$28,789.66	$3,159.76	-9.9%	244
	6/15/2014	$23,975.78	$21,747.05	$2,228.73	-9.3%	245
	11/5/2013	$21,918.96	$19,980.12	$1,938.84	-8.8%	246
	4/14/2014	$20,368.91	$18,837.40	$1,531.50	-7.5%	247
	6/16/2014	$16,198.97	$15,086.17	$1,112.80	-6.9%	248
	4/28/2014	$18,688.31	$17,572.14	$1,116.17	-6.0%	249
	5/11/2014	$18,098.84	$17,348.91	$749.93	-4.1%	250
	5/27/2014	$24,228.42	$23,382.38	$846.03	-3.5%	251
	1/30/2014	$27,136.36	$26,203.37	$932.98	-3.4%	252
	5/13/2014	$18,478.57	$17,999.86	$478.70	-2.6%	253
	9/11/2013	$16,962.55	$16,647.26	$315.29	-1.9%	254
	6/30/2014	$19,588.61	$19,235.04	$353.57	-1.8%	255
	11/13/2013	$20,053.75	$19,837.38	$216.37	-1.1%	256
	5/30/2013	$18,184.56	$18,628.62	-$444.06	2.4%	257
	9/1/2013	$18,428.96	$18,915.25	-$486.29	2.6%	258
	7/19/2013	$21,561.71	$22,353.19	-$791.48	3.7%	259
	3/12/2014	$32,123.59	$34,021.26	-$1,897.67	5.9%	260
	12/9/2013	$17,848.98	$19,119.92	-$1,270.94	7.1%	261
	4/14/2014	$15,765.68	$17,158.89	-$1,393.21	8.8%	262
	12/12/2013	$21,960.98	$23,988.20	-$2,027.22	9.2%	263
	6/18/2014	$13,586.45	$15,155.20	-$1,568.76	11.5%	264
	11/18/2013	$16,900.21	$19,024.14	-$2,123.94	12.6%	265
	4/29/2014	$33,063.24	$37,290.82	-$4,227.58	12.8%	266
	2/3/2014	$20,320.13	$23,356.24	-$3,036.11	14.9%	267
	6/26/2014	$32,500.56	$37,642.58	-$5,142.02	15.8%	268
	3/31/2014	$22,300.42	$26,209.33	-$3,908.91	17.5%	269
	5/16/2013	$28,773.77	$33,852.43	-$5,078.67	17.7%	270
	12/3/2013	$28,186.92	$33,489.40	-$5,302.48	18.8%	271
	6/25/2014	$32,414.09	$38,720.81	-$6,306.72	19.5%	272
	4/23/2014	$33,148.59	$39,830.75	-$6,682.16	20.2%	273
	1/15/2014	$25,979.99	$31,313.93	-$5,333.94	20.5%	274
	2/21/2014	$15,539.90	$19,209.17	-$3,669.27	23.6%	275
	4/14/2014	$37,885.86	$48,189.97	-$10,304.12	27.2%	276
	5/21/2014	$10,931.59	$14,110.25	-$3,178.66	29.1%	277
	6/27/2014	$16,401.92	$21,203.79	-$4,801.87	29.3%	278
	6/15/2014	$17,400.46	$22,883.61	-$5,483.16	31.5%	279
	5/28/2014	$24,267.13	$32,080.82	-$7,813.69	32.2%	280
	5/28/2014	$10,695.58	$14,820.20	-$4,124.62	38.6%	281
	7/11/2013	$30,360.68	$44,063.98	-$13,703.30	45.1%	282
	4/10/2014	$18,629.19	$28,521.35	-$9,892.16	53.1%	283
	3/6/2014	$11,769.45	$18,654.84	-$6,885.39	58.5%	284
	6/15/2014	$36,733.34	$63,486.91	-$26,753.58	72.8%	285
	12/11/2013	$25,084.71	$45,245.30	-$20,160.58	80.4%	286
	5/29/2014	$18,631.35	$33,895.55	-$15,264.20	81.9%	287
	2/4/2014	$26,426.98	$48,533.94	-$22,106.96	83.7%	288
	7/19/2013	$32,917.14	$65,166.76	-$32,249.63	98.0%	289
	4/9/2014	$14,166.52	$29,281.11	-$15,114.59	106.7%	290
	11/27/2013	$10,397.77	$34,286.20	-$23,888.42	229.7%	291
Total		**$8,325,857.02**	**$5,203,911.23**	**$3,121,945.79**	**-37.5%**	

EXHIBIT 10

Review of Class Members by Demographic Groupings

Race	Gender	Total Class Members	Current Age (12/31/2015)	Percentage of Total Class Members	Class Members Transitioned Through (12/31/2015)	Age at Transition	Percentage of Transitioned Class Members	Class Members in Sample	Age at Transition	Percentage of Class Members in Sample
American Indian/Alaska Native	Female	13	71	0%	0	N/A	0%	0	N/A	0%
American Indian/Alaska Native	Male	21	61	0%	0	N/A	0%	0	N/A	0%
Asian	Female	949	84	2%	2	37	0%	0	N/A	0%
Asian	Male	533	77	1%	6	49	1%	2	44	1%
Black	Female	8,956	75	19%	223	56	21%	65	55	22%
Black	Male	8,813	66	19%	410	55	38%	107	55	37%
Hawaiian Native/Other Pacific Islander	Female	47	76	0%	0	N/A	0%	0	N/A	0%
Hawaiian Native/Other Pacific Islander	Male	29	75	0%	0	N/A	0%	0	N/A	0%
Multi-Race	Female	14	73	0%	0	N/A	0%	0	N/A	0%
Multi-Race	Male	15	66	0%	0	N/A	0%	0	N/A	0%
White	Female	13,252	82	28%	142	57	13%	32	58	11%
White	Male	9,028	71	19%	209	57	19%	64	56	22%
Did Not Answer/Unknown	Female	2,734	80	6%	25	59	2%	8	57	3%
Did Not Answer/Unknown	Male	2,528	70	5%	60	56	6%	13	51	4%
Total		**46,932**	**75**	**100%**	**1,077**	**56**	**100%**	**291**	**55**	**100%**

EXHIBIT 11

Review of Class Members by Geographic Groupings

Geographic Area	Total Class Members	Percentage of Total Class Members	Transitioned Members	Percentage of Transitioned Class Members	Class Members in Sample	Percentage of Class Members in Sample
Non-Chicago Geographic Areas	23,360	50%	358	33%	101	35%
Far North Side	8,682	19%	276	26%	85	29%
North Side	1,770	4%	21	2%	6	2%
South Side	3,104	7%	145	13%	44	15%
West Side	3,432	7%	109	10%	21	7%
Southwest Side	1,876	4%	43	4%	6	2%
Far Southeast Side	1,615	3%	38	4%	8	3%
Northwest Side	838	2%	35	3%	7	2%
Far Southwest Side	1,801	4%	46	4%	13	4%
Near North Side	245	1%	3	0%	0	0%
Central	81	0%	1	0%	0	0%
Near West Side	65	0%	1	0%	0	0%
Total	**46,869**	**100%**	**1,076**	**100%**	**291**	**100%**

EXHIBIT 12

Demographic and Geographic Grouping of Transitioned Class Member Costs (Including Extrapolation of Pretransition Costs)

Race	Member Count	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference
Asian	2	$56,073.28	$21,305.05	$34,768.23	-62.0%
Black	172	$5,021,112.13	$3,251,588.34	$1,769,523.79	-35.2%
White	96	$2,646,604.28	$1,591,885.43	$1,054,718.85	-39.9%
Did Not Answer/Unknown	21	$602,067.32	$339,132.40	$262,934.92	-43.7%
Total	**291**	**$8,325,857.02**	**$5,203,911.23**	**$3,121,945.79**	**-37.5%**

Gender	Member Count	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference
Male	186	$5,206,481.33	$3,331,761.56	$1,874,719.77	-36.0%
Female	105	$3,119,375.69	$1,872,149.67	$1,247,226.02	-40.0%
Total	**291**	**$8,325,857.02**	**$5,203,911.23**	**$3,121,945.79**	**-37.5%**

Race	Gender	Member Count	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference
Asian	Male	2	$56,073.28	$21,305.05	$34,768.23	-62.0%
Black	Female	65	$2,004,910.98	$1,171,808.81	$833,102.17	-41.6%
Black	Male	107	$3,016,201.15	$2,079,779.54	$936,421.62	-31.0%
White	Female	32	$874,998.65	$578,094.19	$296,904.46	-33.9%
White	Male	64	$1,771,605.63	$1,013,791.24	$757,814.39	-42.8%
Did Not Answer/Unknown	Female	8	$239,466.06	$122,246.68	$117,219.38	-49.0%
Did Not Answer/Unknown	Male	13	$362,601.26	$216,885.72	$145,715.54	-40.2%
Total		**291**	**$8,325,857.02**	**$5,203,911.23**	**$3,121,945.79**	**-37.5%**

Geographic Area	Member Count	Total Pretransition Costs	Total 12 Month Post Transition Cost Including Amortization and Allocation	Variance	Percent Difference
Far North Side	85	$2,332,112.29	$1,561,359.87	$770,752.42	-33.0%
Far Southeast Side	8	$209,929.19	$181,230.16	$28,699.03	-13.7%
Far Southwest Side	13	$390,549.30	$221,552.02	$168,997.28	-43.3%
North Side	6	$198,308.94	$120,712.02	$77,596.92	-39.1%
Northwest Side	7	$218,762.36	$156,638.60	$62,123.76	-28.4%
South Side	44	$1,281,690.24	$838,468.86	$443,221.38	-34.6%
Southwest Side	6	$188,725.24	$159,640.25	$29,084.99	-15.4%
West Side	21	$570,999.94	$404,417.84	$166,582.10	-29.2%
Chicago Sub-Total	**190**	**$5,391,077.49**	**$3,644,019.61**	**$1,747,057.88**	**-32.4%**
Non-Chicago Geographic Areas	101	$2,934,779.52	$1,559,891.61	$1,374,887.91	-46.8%
Total	**291**	**$8,325,857.02**	**$5,203,911.23**	**$3,121,945.79**	**-37.5%**

APPENDIX A

Appendix A – Review of Statistical Analysis
(Including Extrapolation of Pretransition Costs)

This section summarizes an analysis of data which compares the cost of providing care in a SNF against the cost of providing housing and support services in a community-based setting. Specifically, the data includes the costs for 291 test transition Class Members for 12 months prior to and after transitioning out of the SNF.

The average cost of care for transitioned Class Members prior to transitioning was $28,611 versus $17,883 after transitioning, a decline of $10,728 or 37.5%. The median costs prior to transition were similar to the average costs but the median post transition costs were $17,084[1], $799 less than the mean. The median costs declined by $10,731 or 38.6%. The costs rose an average of $8,069 for 35 transitioned Class members and declined an average of $13,298 for 256 transitioned Class Members.

Statistical Summary of Preliminary Data

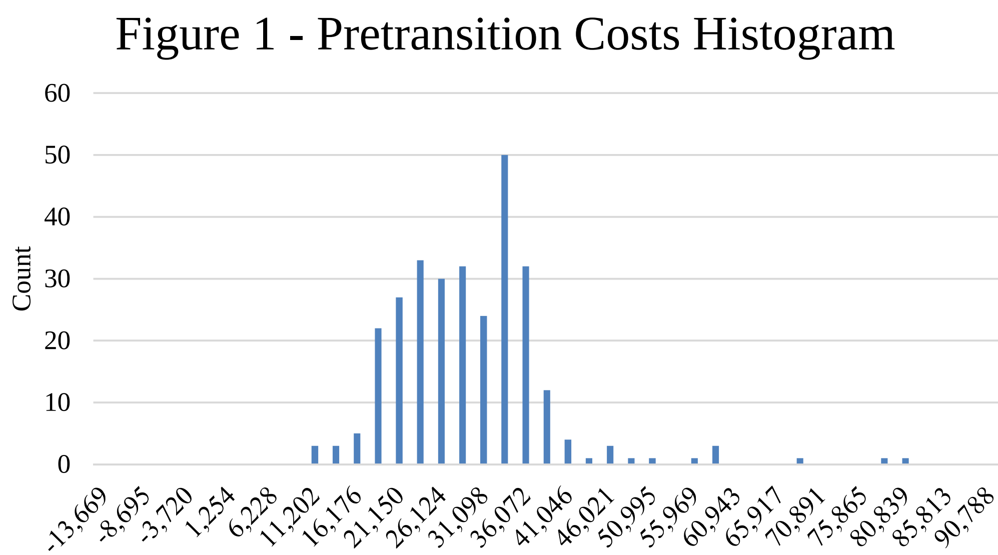
Table 1 shows a statistical summary of the 12 month pretransition and post transition cost data.

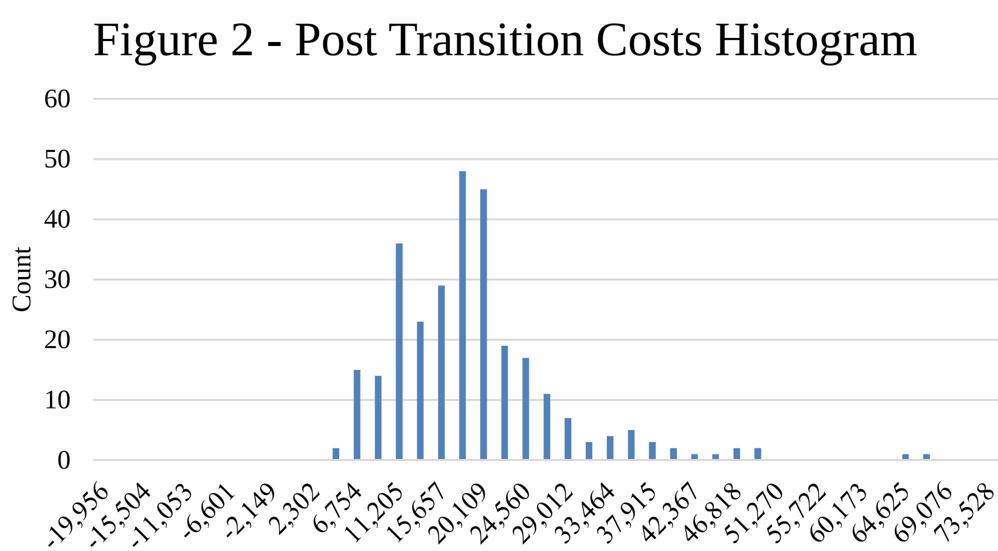
	Pretransition	Post Transition	Cost Difference	Percent Difference
Minimum	10,397.77	4,344.70	-57,890.24	-88.39%
Maximum	95,951.81	65,166.76	32,249.63	229.75%
Sum	8,325,857.02	5,203,911.23	-3,121,945.79	-96.11
Count	291	291	291	291
Median	27,814.95	17,083.81	-10,731.14	-39.23%
Mean	28,611.19	17,882.86	-10,728.34	-33.03%
St. Dev.	9,948.21	8,903.23	11,355.29	36.43%
Skewness	2.34	1.75	-0.11	2.19
Kurtosis	11.37	5.49	2.66	10.24
No. SDs	2.88	2.01	0.94	0.91
Prob			82.76%	81.77%
S.E. of the mean	583.17	521.92	665.66	2.14%
No. SEs	49.06	34.26	16.12	15.47
Prob			100.00%	100.00%

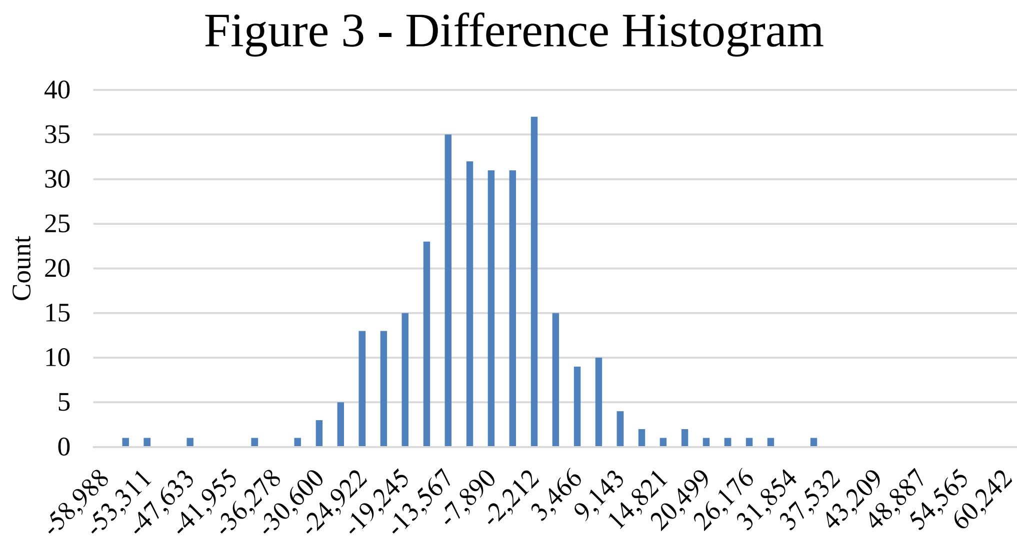
[1] The median is less sensitive to "outlier" or very high or very low cost differences in a small number of observations.

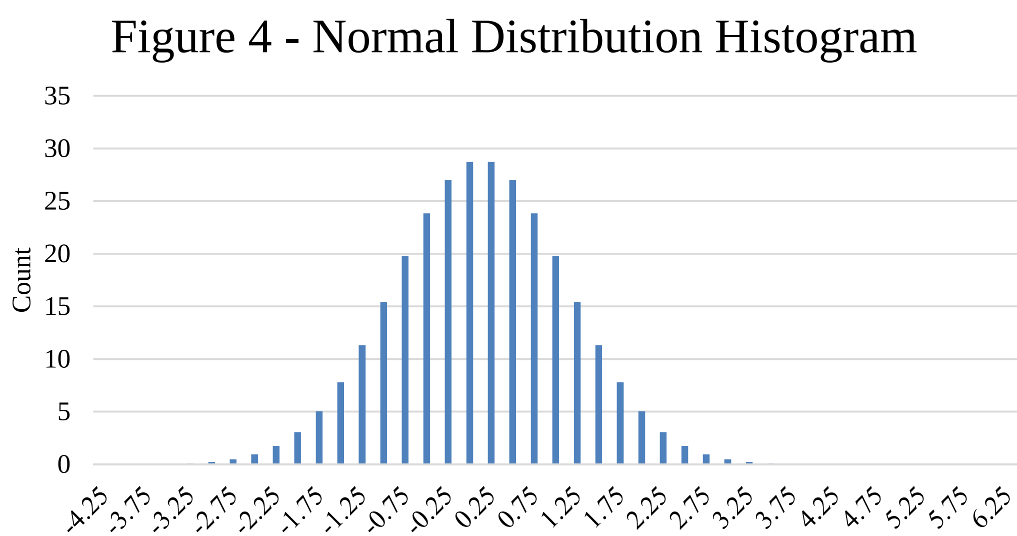
No. Up	35	12.0%
No. Down	256	88.0%
No. Unchanged	0	0.0%
Ave. Increase	-13,298	
Ave. Decrease	8,069	

The data shows a couple of statistical characteristics that can be seen in Figures 1 to 4 below:









As can be seen both in Table 1 and Figures 1 and 2, the cost data is “noisy”. A number of pretransition costs are below $15,000 or above $50,000. The standard deviation of $9,948 implies that only about two thirds of the observations are within a range from $18,663 and $38,559. Costs after transition are consistently smaller, visible by comparing the scale on the base of Figure 1 to the scale on the base of Figure 2. That difference primarily reflects an overall cost reduction, not a reduction of the noise in the data. Table 1 shows that the standard deviation remains at $8,903, declining much less than the average cost decline. Likewise, a view of the bars in Figure 2 show that it is not uncommon for costs to be outside a range of approximately $8,000 to $32,000. This noise makes standard statistical tests a bit more uncertain in establishing the statistical significance of the cost reduction. Figure 4 shows a standard normal distribution for comparison.

Table 1 also shows that the pretransition costs and the post transition costs are substantially skewed. Skewness is a measure of a tendency of the data to extend further to the right (a positive skew number), to the left (a negative skew number) or not skewed (zero). Skewness of 2.34 and 1.75 show that the data is significantly skewed right, meaning that there are a significant number of data points reflecting significantly higher costs for some transitioned Class Members relative to the number of transitioned Class Members experiencing costs well below the mean. The skewness is more significant for the pretransition data, which can be observed in the skewness measure on Table 1 and by visually comparing the number of high cost outliers in Figure 1 compared to Figure 2. Figure 4 shows the standard normal[2] distribution, which does not have skewed observations.

Table 1 also shows that the pretransition costs and the post transition costs exhibit excess kurtosis. Kurtosis is a measure of the extent that outliers are present in the data. Excess kurtosis means that there are "fat tails" (positive kurtosis number), that is, significantly more outliers than would be expected if the data was normally distributed. Both the pretransition costs and the post transition costs show significant excess kurtosis at 11.37 and 5.49, respectively. In comparison, the normal distribution in Figure 4 shows no observations far from the mean, compared to the Figure 1 and Figure 2.

Figure 3 shows the dollar difference and Table 1 describes both the dollar difference and the percent difference. The differences remain noisy, having a standard deviation ($11,355) a bit higher than pretransition costs and a bit lower than post transition costs. The differences are not very skewed, measuring (0.11) and show less but still significant excess kurtosis at 2.66. It is possible that the skewness and excess kurtosis in the cost differences will decline somewhat with a larger the sample size when data from later transitions are added to the sample.

Statistical Comparison of Cost Differences

The first comparison we made was to study the dollar difference and the percent difference in cost before and after the transition. As reported above, Table 1 shows a mean dollar difference (that is, the average of the individual dollar differences in cost) of $10,728. The standard deviations of these differences are $11,355. This means that the mean dollar difference is 0.94 standard deviations away from zero; the mean savings is statistically a good amount larger than zero, measured relative to the

[2] In this report, the word "normal" will always refer to the "normal distribution" in statistics, a mathematical statement.

standard deviation. This means that transitioning an individual will result in lower costs about 82.8% of the time.

The standard deviation of the cost difference reflects: 1) factors related to individual transitioned Class Members' geography, race, age, and general health status; and 2) patient-specific outcomes prior to or after transitioning. The first reason for variability in cost savings could potentially involve factors that are predictable. However, since the question at hand is whether the cost reduction is applicable to a larger population group, being able to predict individual outcomes is not important. Rather, the question involves the total or average cost reduction.

The second reason for variability in savings reflects unpredictable events. For example, a Class Member that experienced a significant medical event in the 12 months prior to transition would show higher pretransition costs and another patient that had a significant medical event in the 12 months after transition would show higher post transition costs. Yet, when viewing the average cost of pretransition and post transition costs, such uncertainty disappears.

The common statistical measure of uncertainty of an average is called the standard error, in contrast to the standard deviation, which measures the uncertainty of individual samples. The standard error can be derived from the standard deviation:

$$\text{Standard Error} = \frac{\text{StandardDeviation}}{\sqrt{N}}$$

where N is the number of observations being averaged. Recall from Table 1, that the average savings on 291 transitioned Class Members was $10,728. The standard error of that average is $665.7 ($11,355 / √291). While there is an 82.8% chance that transitioning results in lower costs for a particular patient, there is virtually 100% chance that the next 291 transitioned Class Members will produce lower costs on average.

Regression Comparison of Cost Differences

A common way to conduct a test on this cost data is to run a linear regression. The regression equation is Equation 1:

$$\begin{array}{lllllllll} Y & = & m & * & X & + & b \\ \text{Costs}_{\text{Pre}} & = & \text{Savings}_{\text{Percent}} & * & \text{Costs}_{\text{Post}} & + & \text{Savings}_{\text{Dollar}} \end{array} \qquad (1)$$

In Equation 1, $Costs_{Pre}$ represent the dependent variable, often represented as "Y". $Costs_{Post}$ represent the independent variable, often represented as "X". $Savings_{Percent}$ represents a regression slope, often represented as "m". $Savings_{Dollar}$ is a regression constant, often represented as "b".

Table 2 shows regression results using the 291 data points.

Table 2 - Linear Regression Results

M	0.25	10,757.78	B
S.E.(m)	0.05	1,531.41	S.E.(b)
R-Sq	7.74%	8,566.38	S.E.(y)
F	24.25	289	df
ssreg	1,779,896,324	21,207,668,196	ssresid

Both the slope (m), and the constant (b) are quite significant. The slope is very much different from 1.00 (that there is no difference in cost), 14.84 times the standard error of the slope estimate.[3] Likewise, the constant, b, is significantly different from zero, 7.02 times the standard error of the intercept estimate.[4] However, the regression explains relatively little of the variation in costs. For example, an R^2 of 7.74% means that the regression failed to explain 92.26% of the variability of the post transition costs. The F statistic, 24.25, measures the validity of the regression equation. The probability of the F statistic is very low (near 0%), meaning that the regression does not provide statistically significant information.

The regression nevertheless provides an estimate of the post transition costs. The model says that these costs will equal a fixed amount of $10,758 plus a variable amount equal to 25 percent of the pretransition costs. Taken at face value, this result suggests the largest savings would result by transitioning Class Members out of high cost nursing homes, saving some 75% of the pretransition costs net of the fixed costs, which would also apply to transitions out of lower cost nursing homes. This common sense suggestion gets just weak support from the regression equation because such a large amount of the variability in the data remains.

[3] (1.00-.25) / .05.
[4] 10,758 / 1,531.