



Changing an Art to Science – Evaluating Transplant Provider Contracts



The world of transplantation is dynamic, ever-changing and costly. Transplants represent extraordinary financial risk to an organization's health care costs. The average billed cost for a transplant episode is \$471,857<sup>1</sup>, but depending on the circumstances, it can quickly rise to \$1 million or more.

To help manage these costs, specialty transplant networks have evolved on the premise that aggregating purchasing power can drive deeper discounts. Though competition among specialty transplant vendors has increased, contract performance transparency across different vendors has not. To complicate matters, vendors define the transplant episode differently and have different case rate inclusions, further complicating the task of determining which provider contract will deliver the lowest cost.

Recently OptumHealth asked a customer focus group comprised of case managers from stop-loss carriers, health plans, case management companies and managing general underwriters (MGUs), about the challenges of comparing transplant contracts. All participants stressed the difficulties in comparing transplant provider contracts and predicting which contract will yield the lowest cost. The participants stressed a number of challenges:

- There are no public data available to predict billed charges at the facility level. Milliman publishes national averages which is limited in that it does not include facility specific data.
- There are many factors within transplant provider contracts. Transplant provider contracts are very complex and can include dozens of terms, rates and outlier triggers for a single transplant program.
- Calculating all the terms, rates and outlier triggers against billed charges can be very time consuming.
- It is not only challenging to predict risk across the whole episode, from evaluation to one-year post transplant, but also to evaluate all the terms that apply.
- There is a need to perform comparisons on a continuous basis since many provider contracts change annually.

This paper provides an analysis of the requirements for effective provider contract comparison. It looks at each aspect of the provider contract in detail and provides examples to highlight the issue in question. Finally, it provides an introduction to how Optum is leveraging its data assets, knowledge and expertise to build solutions for its customers to optimize the management of transplant costs.

## **Defining the transplant episode**

Many organizations publish financial data to disclose billed and paid charges of a transplant episode. Understanding the definition of a transplant episode and the inclusions within the published billed and paid charges is the first step of effective contract evaluation. The average billed charges published by Milliman, for example, include transplant related charges from 30-days before the transplant up until 180-days post hospital discharge. The charges published by OptumHealth include all charges from transplant evaluation up until one-year post discharge. Some transplant network vendors publish the charges that incur during the inpatient confinement only. Misinterpreting the episode definition could lead to the wrong conclusion about which provider contract will produce the best results.

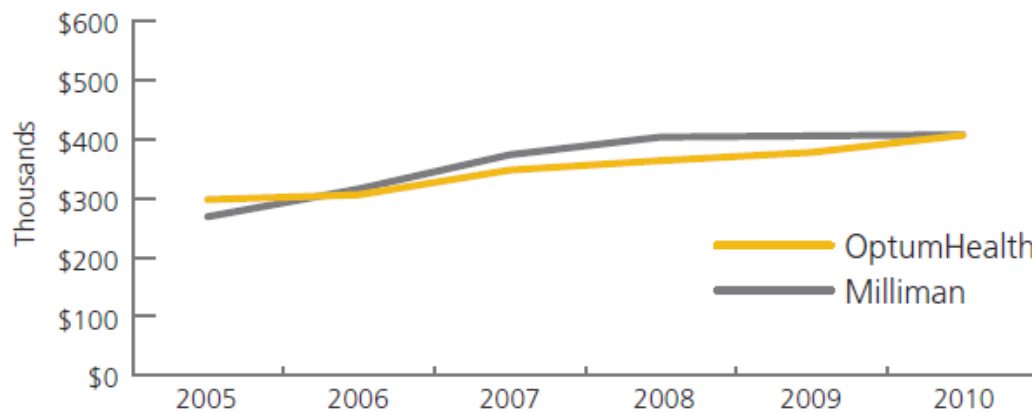
A final detail in a transplant episode definition is the time in which the billed charges occurred. Average billed charges per transplant have increased over the years, due to reasons such as inflation and clinical advances; an out-of-date figure will underestimate both billed and paid charges.

**Table 1: Transplant Episode Definitions**

<b>OptumHealth</b>	Phase 1 Evaluation	Phase 2 Pre-Transplant	<b>Phase 3 Transplant Episode - Inpatient Confinement</b>	Phase 4 90 Days Post- Discharge	Phase 5 365 Days Post- Discharge
<b>Milliman</b>	Not Included	Pre- Transplant 30 days	<b>Transplant Episode - Inpatient Confinement</b>	Post-Transplant 180 Days Post- Discharge	Not Included
<b>Other Transplant Networks</b>	Not Included		<b>Transplant Episode - Inpatient Confinement</b>	Not Included	

When data definitions are the same –that is, an apples-to-apples comparison –the billed charges will align closely.\* The analysis in **Table 2: OptumHealth versus Milliman Comparison** includes charges incurred during the inpatient confinement and organ acquisition only. The gray line represents the average billed per transplant published in the annual Milliman report. The yellow line represents OptumHealth’s actual experience. The chart demonstrates that each year both data sets produce almost identical average billed charges per transplant. This aligned outcome is expected since facilities cannot legally charge different rates to different payers.

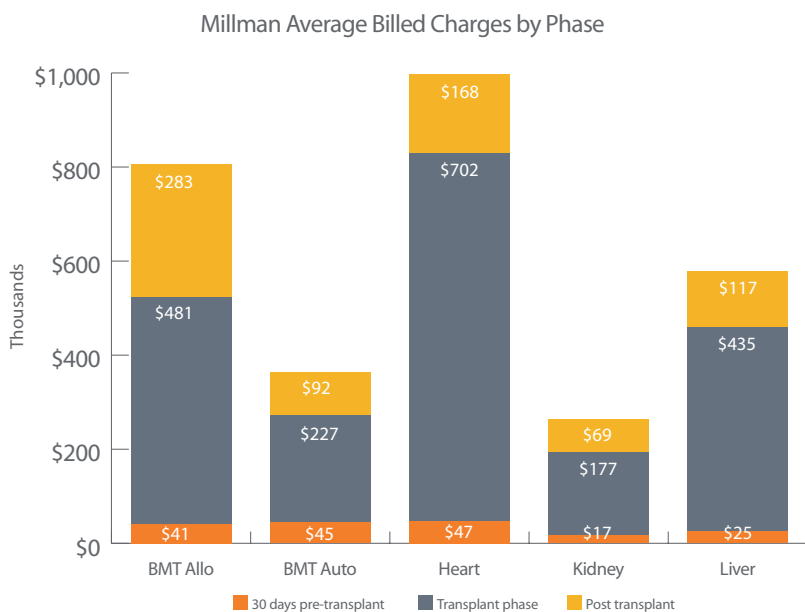
**Table 2: OptumHealth versus Milliman Comparison<sup>2</sup>  
Liver Average Billed Charges — Inpatient Confinement Period**



Ensuring an analysis evaluates the whole transplant episode is also critical, as significant charges continue to occur outside the transplant period. Milliman’s 2011 report projects that \$324,000 of billed charges (or 40.3 percent) occur outside the inpatient confinement period for an allogeneic bone marrow transplant (BMT Allo) and \$142,000 (or 24.7 percent) for liver transplants. A difference of ten percent in savings for a BMT Allo outside the inpatient confinement period could save (or cost) a payer \$30,000 or more.

\*Representative sample size also required

**Table 3: 2011 Milliman charges by phase<sup>1</sup>**



Overlooking transplant episode definitions, inclusions and dates can lead to misinterpretations and ultimately inaccurate contract comparisons. An example of a potential misinterpretation, shown on **Table 4: Example of Billed Charges Misinterpretation**, demonstrates how easily misconceptions can happen. Network B appears to deliver lower costs. A closer look at the data, however, demonstrates this may not be the case. The billed charges published by Network B are from 2009, three years out of date, and represent only the transplant period, excluding 24.7 percent of charges that occur outside the inpatient confinement. Comparing Network B to Network A with these figures misrepresents billed charges, and as a result, also significantly underestimates the paid charges.

In contrast, the data published by Milliman, and that published by Network A, provides a much more inclusive representation of billed charges and is up-to-date, leading to an accurate comparison and comprehensive baseline of billed charges. The paid charges published by Network B are not relevant due to out-of-date data and incomplete representation of billed charges. A more accurate methodology would apply Network B’s 33 percent discount to the billed charges published by Milliman or Network A.

**Table 4: Example of Billed Charges Misinterpretation**

	Milliman 2011 – Average Billed Charges <sup>1</sup>	Network A – Average Billed Charges <sup>2</sup>	Network A – Average Billed Charges <sup>2</sup>
Liver Billed Charges	\$577,100	\$592,255	\$315,000
Liver Billed Charges		\$274,983	\$210,000
Liver Billed Charges		54%	33%

Source:

1 - Milliman annual cost data 2011

2 - 2012 Network A re-priced claims data (phases I-IV), reconciled cases as of 2/20/2012

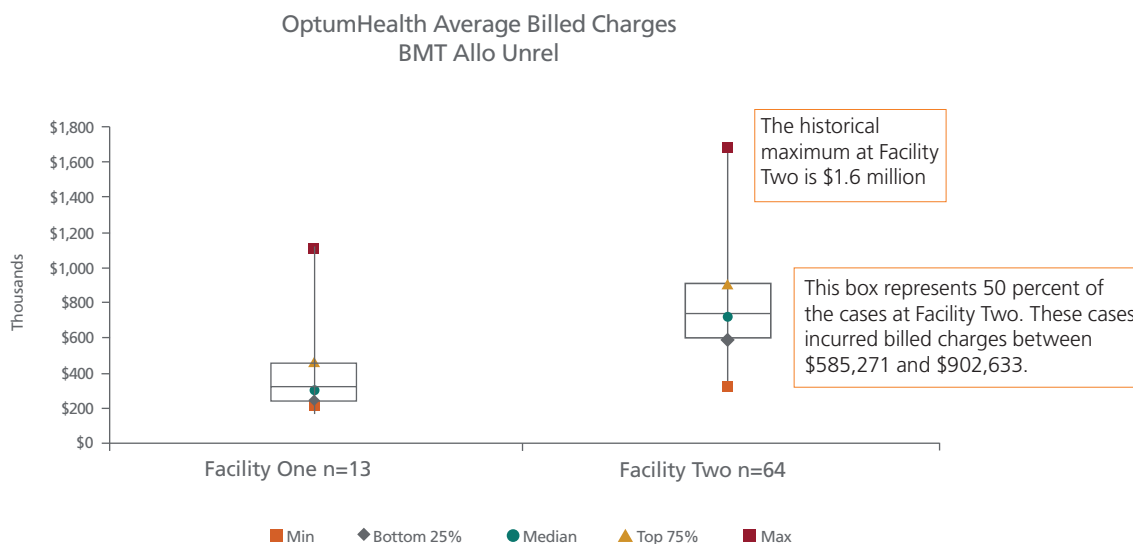
3 - 2009 Network B claims data (transplant period), hypothetical example based on publically available data, accessed 4/4/2012

### Predicting what a facility will bill

Predicting facility billing patterns is another major challenge to accurately evaluate contracts. The transplant industry continues to experience high variation in billing patterns between facilities, not only in different regions, but also within the same city. Although Milliman provides an adequate national projection, the report does not project billed charges at the facility level. Furthermore, Milliman only publishes an average, which falls short of revealing a worst case scenario.

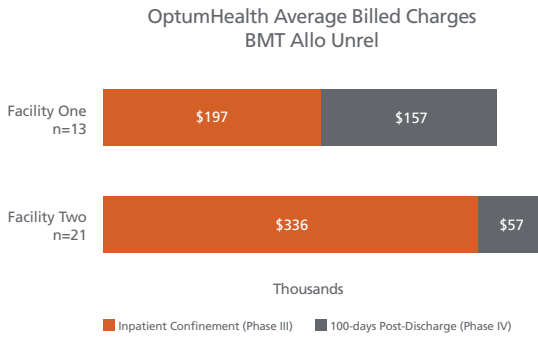
In the example shown on **Table 5: OptumHealth® Range of Billed Charges – BMT Allo Unrelated**, Facilities One and Two historically bill very different amounts. Upon comparison, the median billed per case produced vastly different results: Facility One median billed is \$319,462 while Facility Two median billed is \$718,345, a difference of \$398,883. In addition, Facility Two has less predictability, as evidenced by the wider distribution of charges. At Facility Two the middle 50 percent incurred between \$585,271 and \$902,633 of billed charges, compared to a much lower range of \$244,532 and \$459,537 at Facility One. Furthermore, the historical maximum at Facility Two is \$1.6 million compared to only \$1.2 million at Facility One. Different sets of provider contract terms will perform very differently depending on these different sets of billed charges.

**Table 5: OptumHealth Range of Billed Charges – BMT Allo Unrelated<sup>3</sup>**



In addition to billing variation across the entire transplant episode, facilities can also vary significantly in how they bill across phases. In the example shown on **Table 6: OptumHealth Average Billed Charges – BMT Allo Unrelated**, Facility One typically bills most of its charges during the inpatient confinement period of a transplant episode. In contrast, Facility Two bills much more of its charges during the 90-day period following the hospital discharge. An analysis that does not account for this variation in a provider contract comparison can cost the payer tens of thousands of dollars. For example, one provider contract may include the 90-day post discharge period as a part of its case rate period, and another provider contract may include only the inpatient confinement in its case rate.

**Table 6: OptumHealth Average Billed Charges – BMT Allo Unrelated<sup>3</sup>**



Recognizing the significant billing pattern variations across facility is vital to an accurate comparison. An effective contract comparison incorporates three things:

1. Predicating billed charges at the facility level
2. Predicting what a facility will bill in the average case scenario, as well as a high dollar case scenario
3. Predicting facility billing patters across the entire transplant episode.

### OptumHealth’s Client Solution

In 2012, OptumHealth launched a transplant contract comparison tool to address the issues discussed above and help clients efficiently and effectively compare transplant provider contracts. This tool gives users the ability to compare up to five network contracts at a time in as little as five to ten minutes. Key features include the ability to predict billed charges at the facility level, evaluate and compare all the complex combinations of contract terms across the entire transplant episode, and compare how each contract will perform in an average case scenario as well as a high dollar case scenario. Finally, use of the tool is completely confidential to the user. The tool is housed on the users desktop and can be used while not connected to the internet to ensure 100 percent confidentiality.

### Customer Feedback

“Wanted to say thank you for the presentation, it was wonderful and I really feel this would be a great tool for many TPA’s.”

“Objective. Significant time savings to make network comparisons. Tool is consistent with manual analyses conducted previously.”

“Valuable for underwriters and the lasering process.”

“I have used the comparison tool and find it extremely helpful! It’s funny – you don’t really know how a contract will behave until you plug in those variables!”

## Authors

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To request a contract comparison tool demonstration or to learn more about OptumHealth® transplant solutions, contact us at 1.866.427.6845 or email us at [engage@optumhealth.com](mailto:engage@optumhealth.com).

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## About Optum

Optum is an information and technology-enabled health services company serving the broad health care marketplace, including care providers, health plans, life sciences companies and consumers. Its business units — OptumInsight, OptumHealth and OptumRx — employ more than 30,000 people worldwide. For more information about Optum and its products and services, please visit [www.optum.com](http://www.optum.com).

## References

1. Milliman 2011 annual cost data. Average cost includes evaluation, procurement, hospital, physician, follow up and maintenance therapy (30-days pre-transplant – 180-days post-discharge)
2. Inpatient confinement period (OptumHealth phase III) includes acquisition, harvesting, transport, storage, etc.; Source: OptumHealth re-priced claims (Facets). Reconciled cases as of April 13, 2011; Milliman annual cost data 2005-2011. Milliman did not report 2009, therefore and average of 2008 and 2010 was used in 2009.
3. OptumHealth re-priced claims data, phases I-IV, reconciled cases as of 2/20/2012



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