Quality and Value in Stem Cell Transplant
What do employers and payers want to see?
Anthony F Bonagura MD

Our Business Context

UnitedHealthcare
Health care coverage and benefits businesses, unified under a master brand
- Employer and Individual
- Community and State
- Medicare and Retirement

Optum
Information and technology-enabled health services platform, encompassing:
- Technology solutions
- Intelligence and decision support tools
- Health management and interventions
- Administrative and financial services
- Pharmacy solutions

Helping people live healthier lives
Helping to make the health care system work better for everyone
OPTUM™ An Aligned Health Services Platform

One of the largest health information, technology and consulting companies in the world
The leader in population health management serving the physical, mental and financial needs of both individuals and organizations
The pharmacy management leader in service, affordability and clinical quality

Independent, market-leading businesses providing services to:
6,200 hospital facilities
246,000 health care professionals or groups
60 million individuals
2,000 Payers
40% of Fortune 500 Companies
270 government agencies

Optum Solutions: Specialty Networks

We help payers assess, simplify and integrate their clinical management strategies with solutions focused on improving their business

Complex Medical Conditions
• Transplant Solutions
  Ventricular Assistive Device
  Congenital Heart Disease
• Kidney Solutions
• Infertility Solutions
• Bariatric Resource Solutions
• Sickle Cell Disease

Physical Health
• Chiropractic
• Physical & Occupational Therapy
• Speech Therapy
• Complementary & Alternative Medicine (CAM)
  • Acupuncture
  • Naturopathy
  • Massage Therapy

Behavioral Health
• Comprehensive Behavioral Health (mental health and substance use disorders)
• Medical/Behavioral Integration solutions
• EAP and Work/Life

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Optum Transplant Solutions: What is Our Perspective?

- Optum Transplant Solutions is a specialty health business servicing over 51 million people
- Our clients include employers and payers
- Optum Specialty Networks develops Centers of Excellence networks and case management solutions to address costs associated with Transplants, Cancer, Kidney Disease, Infertility, NICU, and Congenital Heart Disease.
  - Almost 9% of all transplants done in the United States are managed through our Transplant Network and when only looking at commercial transplants, Optum manages over 17%
    - Nearly 14,300+ transplant referrals per year
    - Nearly 4,350+ actual transplants per year
  - Optum Transplant Solutions processed over $3.6 billion in medical claims in 2013

Optum Transplant Solutions Scale

- Optum continues to increase volume and purchasing power nationally
  - Nearly $3.6B transplant claims processed annually
Transplants: Low Incidence, High Cost

- A 100,000 life group can expect $7.3M in billed transplant charges

<table>
<thead>
<tr>
<th>Organ Type</th>
<th>Incidence 10,000</th>
<th>Incidence 100,000</th>
<th>Incidence 1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone Marrow</td>
<td>.65</td>
<td>6.46</td>
<td>64.6</td>
</tr>
<tr>
<td>Kidney</td>
<td>.53</td>
<td>5.30</td>
<td>53.0</td>
</tr>
<tr>
<td>Liver</td>
<td>.20</td>
<td>1.98</td>
<td>19.8</td>
</tr>
<tr>
<td>Heart</td>
<td>.07</td>
<td>.67</td>
<td>6.7</td>
</tr>
<tr>
<td>Lung (Singles and Double)</td>
<td>.05</td>
<td>.50</td>
<td>5.0</td>
</tr>
<tr>
<td>Pancreas</td>
<td>.01</td>
<td>.11</td>
<td>1.1</td>
</tr>
<tr>
<td>Multi-Organ/Other</td>
<td>.05</td>
<td>.57</td>
<td>5.7</td>
</tr>
<tr>
<td>Total Transplants</td>
<td>1.5</td>
<td>15.6</td>
<td>156</td>
</tr>
<tr>
<td>Wt Avg Billed Per Transplant</td>
<td>$471,857</td>
<td>$471,857</td>
<td>$471,857</td>
</tr>
<tr>
<td>Total Exposure</td>
<td>$736,096</td>
<td>$7,360,969</td>
<td>$73,609,692</td>
</tr>
<tr>
<td>PMPM</td>
<td>$6.13</td>
<td>$6.13</td>
<td>$6.13</td>
</tr>
</tbody>
</table>

Source: Milliman Cost Estimates, 2011

Meeting the Customers’ Needs

- Our customers rely on us to help them meet a complex need in their business that is not routine, involves complicated medical interventions and large costs

- Our customers would like to get the best treatment for their members. This includes the best outcomes for the best available treatment delivered in the most patient friendly environment and they want to do this in the most cost effective manner

- Stem cell transplants are relatively infrequent events, so some of the concepts used in other areas of managed care may not be applicable

- Stem cell transplants, like all transplants, are best characterized as non-routine. However, they are not necessarily unexpected
COE Evaluation Criteria

- Each program is surveyed and evaluated on an annual basis
  - The evaluation process examines each program’s volumes, outcomes and structure
  - Several data sources are used to conduct additional evaluations. These include: SRTR, OPTN, NDMP, FACT and the Quality of Care Feedback Loop

<table>
<thead>
<tr>
<th>Evaluation Criteria for Solid Organ Programs</th>
<th>Evaluation Criteria for Bone Marrow/Stem Cell Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplant Volumes</td>
<td>Transplant Volumes</td>
</tr>
<tr>
<td>Patient and Graft Survival</td>
<td>Patient Survival</td>
</tr>
<tr>
<td>UNOS Certification</td>
<td>JCAHO &amp; FACT Accreditation</td>
</tr>
<tr>
<td>Medicare Certification</td>
<td>NMDP Affiliation</td>
</tr>
<tr>
<td>Structure: Additional affiliations, accreditations and experience</td>
<td>Medicare Certification</td>
</tr>
<tr>
<td>Processes: Eligibility criteria, clinical trials, CQI, written protocols, peer review journal publications, information management and communications</td>
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</tr>
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For a Optum Client, What Defines Quality?

1. Patient survival, any interval
2. Pre-transplant complications
3. Post-transplant complications and readmissions
4. Length of stay
5. Service disruption
6. Cost at the end of the year
7. Patient experience & satisfaction
8. Experience, both professional and volume
9. Consistency – not every case is going to have a desired outcome but where can a patient go to improve these odds
Custom Network - Advantages

- A smaller network is easier to manage, it allows for a closer relationship with each center. This can lead to:
  1. Greater responsiveness to individual needs of the plan sponsor
  2. Better ability to contract
  3. Can more easily track and improve member satisfaction
  4. Exclusivity allows the plan sponsor to obtain an understanding of the unique characteristics of a given program
  5. Preferential relationships make the programs more responsive to needs of members
  6. Fewer centers creates less variability in care that members receive and hence things like quality and outcomes can be better monitored over time

- This ideally works best with a group that is concentrated in a specific geographic region. However as custom networks progress, we are seeing that it is also being done among larger, more diverse groups

Custom Network - Disadvantages

- Less Choice – Patient advocate sources tend not to favor this type of arrangement
- Limited network may create access issues
- If this results is an increased volume of cases being directed to a smaller number of facilities, it may create problems at some of these facilities
- An unusual/rare case may not be best served among choices in a limited network
- Geographical distribution may create undue hardship in terms of patient access
- Long-term stability may be a problem if a network needs to be altered due to quality and contracting issues
Objective Data Used to Define Quality

- **Outcome Data** – Data such as CIBMTR numbers help but don’t measure all outcomes in a stem cell transplant program (i.e. Allo vs. Auto). Numbers are sometimes small. Case mix is hard to apply to individual cases and can be hard for a layperson to understand. Outcomes that are worse than expected are looked at with importance but may not always be relevant to all types of cases.

- **Volume** - There is no “magic number” that correlates with better outcomes. However, volumes are an important factor when people consider treatment options. High volumes over a period of time also indicate a program that has had a degree of success.

- **Accreditation** – Can be considered important, but is not typically a differentiating factor. Accreditation serves as more of a minimal characteristic that any program that is going to see their member should have. (i.e. FACT)

Identification of a Program Based on Quality

- The process of choosing a facility should be defined beforehand. Though cases are unique events, there needs to be a defined process in place on how to select a facility in an attempt to establish and maintain a rationale consistency.

- The decision on exclusivity of a network is needed. Criteria like FACT accreditation establish a quality benchmark that every program should meet; but what size network is preferable?
  - A large network vs. a more restricted network

- Are some programs better than other? Answer can vary from the general evaluation of a program to the treatment of a specific disease entity but the feeling is that there is a difference.

- Cost is an important issue in healthcare. Choices made in one area of healthcare can affect the ability to finance other areas. How do we best address this complex issue?
Trending

• What is covered? With the Affordable Care Act:
  • There is an expectation that there will be more coverage of clinical trials
    – Expect a greater number of cases to be covered
    – Expect increased discipline on the evaluation of clinical trials both prior to
      inclusion and while the trial is in place
      • Patient must be included in the trial and coverage restrictions such as
        “routine care” clauses will undergo a greater degree of scrutiny
  • State Exchanges-how does this affect transplant program access?
  • With the availability of quality programs in oncology, there will be an
    expectation that there is a better integration of stem cell transplantation into the
    overall oncologic care
  • The decision between a large expansive network of providers and a limited
    more exclusive network. While in the past there has been a bias in favor of
    large inclusive networks, the pendulum has now swung towards smaller
    networks

Challenges for the Future (Now)

• Stem cell transplant cases are relatively rare occurrences but based on their
  cost, they have the potential to affect a group’s ability to cover other types of
  care
• How do purchasers get a handle on quality?
• How do purchasers deliver a product that will satisfy their membership?
• How will healthcare reform impact purchasers ability to serve their membership
  (what will their membership looks like)?