CIBMTR®
CENTER FOR INTERNATIONAL BLOOD & MARROW TRANSPLANT RESEARCH

Summary and Recommendations of the
2016 Center Outcomes Forum
Held on October 19-20, 2016

Executive Summary

The 2016 Center Outcomes Forum was held October 19-20 in conjunction with the Implementing Quality and Value in Stem Cell Transplant Meeting sponsored by the National Marrow Donor Program (NMDP)/Be The Match®. The CIBMTR® (Center for International Blood and Marrow Transplant Research) invited representatives of the hematopoietic cell transplantation (HCT) community, the American Society for Blood and Marrow Transplantation (ASBMT) Quality Outcomes Committee, governmental funding agencies, patients, private payers, and statisticians to participate in discussion around four key topics involving center-specific outcomes reporting:

1. Measuring quality of life in transplant recipients;
2. Supporting quality improvement activities of transplant centers;
3. Handling unintended consequences of public outcomes reporting;
4. Facilitating possible future outcomes metrics for public reporting.

The main discussion and recommendations for each are briefly summarized in the following pages. The final recommendations for the CIBMTR by topic include:

Measuring quality of life in transplant recipients

- Continue to develop experience in the collection and use of patient reported outcome (PRO) data.
- Explore direct-to-patient interfaces to collect these data. such as electronic medical records and PROMIS (NIH's PRO system).
- Use a system which is free, easy to access, and flexible.
- Ensure a low burden for patients and centers.
- Consider a representative sampling approach to transplant centers and patients; the system should allow opt-in for a cohort of centers willing to approach all patients, track, etc.

- Assure that centers can retrieve the PRO data for use in improving care delivery and future research.
- Use consistent "core" PRO measures in all research studies of HCT patients.

Supporting quality improvement activities of transplant centers

- Expand centers' physician and administrative staff access to analytic tools offered by the CIBMTR.
- Work with the ASBMT Committee on Quality Outcomes and other groups to capture socioeconomic status for data analysis and future risk adjustment.
- Work with the ASBMT Committee on Quality Outcomes and other groups to define "standard risk" transplant cohorts whose outcomes could be used by transplant centers to evaluate their programs in comparison with expected outcomes. These tools would not be designed for public reporting.
- Create a "center director dashboard" in the enhanced Data Back to Centers (eDBTC) application with standardized views to help center directors monitor performance prospectively.
    - Create pre-specified dashboards with common indicators (e.g., 100-day, 6-month, 1-year survival) or benchmarked against standard risk sets.
    - Include all patients, not just first allogeneic recipients included in the Center-Specific Survival Analysis.
- Explore additional techniques that allow centers to predict their outcomes prospectively.
- Consider future analyses and visualization tools for quality improvement (QI) to help centers better understand patients whose observed outcomes differ substantially from expected.

Handling unintended consequences of public outcomes reporting

- With guidance from the ASBMT Committee on Quality Outcomes and other stakeholders, continue to refine data elements to account for "high-risk" or innovative transplant approaches in the risk adjustment model.
- Help payers recognize the unintended consequences upon transplant centers and patients of making decisions about program designation based upon a single year of performance "below expected" according to the CIBMTR Center-Specific Survival Analysis.

Facilitating possible future outcomes metrics for public reporting

- Develop a process to routinely analyze three-year overall survival. The results should be made available to centers for QI purposes.
- GVHD is a very important factor in longer-term survival after HCT. CIBMTR should consider providing additional information about incidence of GVHD for centers' QI efforts.

Background

In 1986, the National Bone Marrow Donor Registry (managed by the NMDP was established, with responsibility for maintaining an unrelated donor registry for HCT. In 1990, the Transplants Amendment Act made the reporting of center-specific outcomes for unrelated donor HCT mandatory in the United States. This activity was conducted by the NMDP from 1994 through 2007. With the Stem Cell Therapeutic and Research Act of 2005, the requirement to report HCT outcomes by transplant center was broadened to include all allogeneic (related and unrelated) HCTs in the United States. This responsibility rests with the contractor for the Stem Cell Therapeutic Outcomes Database, currently the CIBMTR.

During the transition phase of the C.W. Bill Young Cell Transplantation Program, the CIBMTR, working with the NMDP, ASBMT, and the Health Resources and Services Administration (HRSA), held a meeting to review the current approach to center-specific outcomes reporting and to provide recommendations for future reports in the expanded Program. With this purpose, the CIBMTR invited representatives of the HCT community (national and international), the ASBMT Quality Outcomes Committee, governmental funding agencies, the solid organ transplant community, patients, private payers, statisticians, and experts in hospital and quality outcomes reporting to Milwaukee, Wisconsin, in September of 2008.

The objectives of the initial meeting were to review the current state of center-specific outcomes reporting in medicine and transplantation and to openly discuss strengths and limitations of current approaches with the goal of developing recommendations for HCT center-specific outcomes reports that would be:

- Scientifically valid;
- Equitable;
- Free from bias;
- Useful to the HCT community for improving quality;
- Informative for the public.

One of the recommendations of the 2008 meeting was to conduct regular reviews, with a broad group of stakeholders, of the process, methodology, data collection and risk adjustment, and reporting. Based on that recommendation, the Center Outcomes Forum has been held every other year since then to consider the CIBMTR Center-Specific Survival Analysis. Summaries of these meetings are available at http://www.cibmtr.org/Meetings/Materials/CSOAForum.

Discussion Topics Related to Center-Specific Survival Analysis

This year's Center Outcomes Forum was held October 19-20, 2016, in conjunction with the Implementing Quality and Value in Stem Cell Transplant Meeting sponsored by the NMDP/Be The Match®. The perspectives presented by national experts on approaches to implementing quality and improving value for patients provided an excellent complement to the Center Outcomes Forum. A summary of the meeting will be made available at https://payor.bethematchclinical.org/Stay-Connected/.

A broad range of invited stakeholders (Appendix A) participated in the Center Outcomes Forum. A summary of the moderated group discussion and recommendations from this meeting follows.

1. Measuring quality of life in transplant recipients

One of the key questions at the 2014 Center Outcomes Forum addressed new measures of quality not currently reported publicly by the CIBMTR that should be included in future iterations of the Center-Specific Survival Analysis (with risk adjustment) on behalf of the HCT community. One suggested measure was patient-reported outcomes assessed one year or later after HCT. Since then, the CIBMTR and NMDP/Be The Match conducted a few studies to assess the feasibility of collecting and reporting patient-reported outcomes. Historically, the HCT community focused on research to improve the potential for survival. An area of unmet research need incorporates patients' perspectives regarding which outcomes, other than survival, are most important as well as the best methods for measuring those outcomes.

Two recent studies were presented to illustrate the possibilities and challenges of collecting PRO. The first is in response to an award from the Patient-Centered Outcomes Research Institute (PCORI), a non-profit organization that funds research to provide evidence-based information, to the NMDP/Be The Match. This PCORI Engagement Award is entitled "Engaging Patients in Developing a Patient-Centered Hematopoietic Cell Transplant Research Agenda." It is a two-year project with three specific aims:

- Recruit and engage a broad community of patients and other key stakeholders interested in patient-centered outcomes research (PCOR) in HCT.
- Identify and prioritize HCT-related patient-centered outcomes that will inform the development of an HCT PCOR agenda.
- Communicate and promote the HCT PCOR agenda to all stakeholders.

Six working groups have been formed to address specific areas:

- Patient, caregiver, and family education and support;
- Physical health and fatigue;
- Emotional, cognitive and social health;
- Sexual health and relationships;
- Models of care delivery/survivorship and late effects;
- Financial burden.

Results of this initiative will be foundational for future trials in comparative-effectiveness research to improve patient-centered outcomes. Information gathered during this project will also inform the CIBMTR about the outcomes that are most important to patients. A summary of the recommendations from this project will be published in the peer-reviewed literature as well as disseminated to patient, health professional, administrator, payer, and research stakeholders through e-newsletters, continuing education webinars, and presentations at national conferences/meetings.

Results of the CIBMTR QOL pilot study, which is in the final manuscript phase, were presented. The primary aim of the study was to evaluate the feasibility of prospective collection of PRO at eight transplant centers reporting clinical data to the CIBMTR. The secondary aim was to correlate PRO with clinical and demographic data routinely collected. PRO are not routinely collected in outcomes registries, although several studies demonstrate pre-transplant PRO measures are associated with outcomes after HCT.

The following study conclusions were reached:

- Participation and retention rates were generally high, establishing it is feasible to prospectively collect PRO directly from patients at multiple time points after HCT.
- Direct-to-patient communication from the CIBMTR is feasible.
- Baseline PRO are significantly associated with survival and post-transplant QOL after adjusting for clinical factors.
- Routine collection of PRO adds value to current clinical data.

Discussion:

There was general agreement and enthusiasm about the value of collecting and reporting PRO in HCT, both pre- and post-HCT. Most attendees stated that development of a standardized infrastructure to capture PRO was of high importance. Among attendee centers, many are currently measuring PRO for their HCT patients and would commit to collecting data in a centralized system. Benefits of collecting PRO include using pre-HCT information to target assistive resources or intervention for greatest risk patients, using the information to better inform future patients' expectations regarding the transplant experience, providing robust data to researchers, and using patient-reported functional status before HCT for risk adjustment. Post HCT patient reported outcomes represent outcomes of clear importance and priority for patients. Limitations include difficulties with collection of complete data since participation is voluntary for patients and centers, collection of representative data, lack of existing standards for PRO instruments in HCT, and the burden of data collection on patients and centers. Research about use of PRO for risk adjustment and outcomes reporting in HCT is still emerging.

The consensus of the group was the limitations preclude required public reporting of PRO-based outcomes measures for all patients.

Recommendations:

- Continue to develop experience in the collection and use of PRO data.

- Explore direct-to-patient interfaces to collect these data, such as electronic medical records and PROMIS (NIH's PRO system).
- Use a system which is free, easy to access, and flexible.
- Ensure a low burden for patients and centers.
- Consider a representative sampling approach to transplant centers and patients; the system should allow opt-in for a cohort of centers willing to approach all patients, track, etc.
- Assure that centers can retrieve the PRO data for use in improving care delivery and future research.
- Use consistent "core" PRO measures in all research studies of HCT patients.

2. Supporting quality improvement activities of transplant centers

This topic highlighted initiatives of the ASBMT's Committee on Quality Outcomes, Foundation for the Accreditation of Cellular Therapy (FACT) accreditation standards and corrective action plan process, and CIBMTR's data visualization tools to assist centers' QI programs. A comprehensive QI case study was also presented by a center.

The ASBMT Committee on Quality Outcomes is involved in several quality initiatives:

Ongoing initiatives

- Provide advice about the CIBMTR's Center-Specific Survival Analysis, particularly data to be collected for risk adjustment.
- Collaborate with FACT Clinical Outcomes Committee to set quality accreditation standards.
- Promote the "Choosing Wisely" campaign, which highlights tests, procedures, and/or treatments for which common use and clinical value are not supported by evidence.

Future initiatives

- Provide center-specific support for QI efforts (education/advocacy efforts related to Center-Specific Survival Report and data use by centers for QI).
- Define additional validated quality measures for HCT and cellular therapy initiatives.
- Explore utilization of patient-reported outcomes by transplant centers.

Relevant FACT standards were reviewed, including the following benchmarks:

- The Clinical Program should achieve one-year survival outcome within or above the expected range when compared to national or international outcome data. (The Center-Specific Survival Analysis measures this for allogeneic programs in the United States.)
- If the expected one-year survival outcome is not met, the Clinical Program shall submit a CAP.
- FACT Guidelines for CAP:
    - Must identify specific causes of death;
    - Must provide quantitative data;
    - Must identify reasonable causes of the low one-year survival rate;
    - Must address the identified causes;
    - Must demonstrate a measurable outcome improvement;

- Must provide updates at time of inspection, annual reporting, and as otherwise directed by committee.

Highlights of several factors consistently found across corrective action plans were reviewed. Consistency and quality of centers' data represent a common theme. FACT offers assistance to transplant centers, including education, individualized attention, and consulting to help them develop a CAP and reach improved outcomes.

CIBMTR tools for quality improvement:

The CIBMTR produces reports using existing data to facilitate centers' QI efforts. Maximizing the value of these reports was a substantial focus of the 2014 Center Outcomes Forum and several subsequent meetings. Since 2014, the CIBMTR developed new tools to visualize and download data for QI purposes.

Currently available tools include:

- Expanded descriptive reports (more variables, better comparison options);
- Additional descriptive outcomes (GVHD, additional time points);
- Expanded access to centers' own datasets;
- A one-year survival calculator, which uses the Center-Specific Analysis to calculate probability of one-year survival after allogeneic HCT for individual patients;
- Center Performance Analytics business intelligence reporting tool (access and analysis of the center-specific dataset used to prepare the center's annual Center-Specific Survival Analysis Report, providing descriptive and comparative statistics and downloadable data formats);
- eDBtC business intelligence reporting tools, which provide access to and analysis of center reported data across all transplants reported to the CIBMTR, including descriptive and comparative statistics and downloadable data formats.

<u>Discussion:</u>

The tools made available to centers by the CIBMTR since 2014 are meaningfully addressing needs of transplant centers. Several centers suggested the CIBMTR make these tools more broadly available within centers, including to center administrative and quality staff as well as physicians. Some centers use these tools, including the survival calculator, to inform decisions regarding selection for HCT.

There remains considerable interest in enhanced tools to better predict centers' performance prospectively. This is a challenge since the current outcome for the analysis relies on at least one year of follow-up. Additionally, the analysis requires complex manipulation of data to perform multivariate adjustment. An alternative approach may be to define a set of characteristics most commonly associated with patient outcomes and create a standard dashboard for center directors to display these indicators, along with early survival outcomes. This could be further enhanced by defining a few "standard risk" patient cohorts whose survival outcomes could be tracked prospectively by centers as a leading indicator. Unadjusted expected outcomes for these cohorts could be defined based on prior years' outcomes and then compared with observed. Limitations to this approach include sufficient

numbers of patients and indications for HCT that are common and easily defined. Some suggestions were made for visualization tools to include in this dashboard.

Centers are also interested in better ways to understand the factors that contribute to performance that is "below expected". The CIBMTR conducted research studies to associate center-related factors with outcomes. Some participants suggested the CIBMTR explore ways to define those patients whose observed survival was substantially different from that predicted by the model so centers could use that information as part of its quality improvement effort. The Scientific Registry of Transplant Recipients (SRTR) produces a "cusum" report, but CIBMTR methodology is not compatible with such an approach.

Centers remain concerned about the unintended consequences of public reporting (Discussion Topic 3), including centers being dropped from payers' "Center of Excellence" designations for a single year of performance "below expected," especially since this has a 2.5% probability of occurring by chance alone. There remains concern whether the risk adjustment model adequately handles socioeconomic status (SES) and disease risk. Dr. Rizzo reminded the group that additional SES and disease-related variables were added to the data collection forms in late 2013 and would be available for use in the 2018 analysis.

Recommendations:

- Expand centers' physician and administrative staff access to analytic tools offered by the CIBMTR.
- Work with the ASBMT Committee on Quality Outcomes and other groups to capture socioeconomic status for data analysis and future risk adjustment.
- Work with the ASBMT Committee on Quality Outcomes and other groups to define "standard risk" transplant cohorts whose outcomes could be used by transplant centers to evaluate their programs in comparison with expected outcomes. These tools would not be designed for public reporting.
- Create a "center director dashboard" in the eDBTC application with standardized views to help center directors monitor performance prospectively
    - Create pre-specified dashboards with common indicators (e.g., 100-day, 6-month, 1-year survival) or benchmarked against standard risk sets.
    - Include all patients, not just first allogeneic recipients included in the Center-Specific Survival Analysis.
- Explore additional techniques that allow centers to predict their outcomes prospectively.
- Consider future analyses and visualization tools for QI to help centers better understand patients whose observed outcomes differ substantially from expected.

3. Handling unintended consequences of public outcomes reporting

A payer panel discussed Centers of Excellence (COE) network strategies and outcomes expectations. There is considerable heterogeneity across payer groups as they respond to stakeholder requests for access, quality, and value. In general, payers' goals are to provide their patients with consistent access

to high quality centers, manage a reasonable number of contracts with centers, and experience stable and predictable financial risk.

Individual payers reviewed their processes for defining the centers to include in their networks. In doing so, they prefer to use objective, publicly available quality metrics that are universally available across transplant programs. Such data is generally available from the CIBMTR. Some payers prefer to establish a HCT network with a relatively limited number of centers that might include less than half of the centers in the United States. Others focus more on contracting with the "best" centers. Criteria commonly used by payers to evaluate quality include FACT/NMDP accreditation and performance from the CIBMTR Center-Specific Survival Analysis. Since a risk-adjusted performance metric does not currently exist for autologous HCT, at least one payer uses the risk adjusted performance for allogeneic HCT to make program-wide decisions for network inclusion. Some payers are using additional information, including outcomes reported through the ASBMT Request for Information (RFI) mechanism, information about program infrastructure and experience, and process measures. Geography plays a small role in COE designation to offer reasonable access to HCT. Payers are increasingly focused on expense of HCT, and, because overall outcomes are generally good, they issue contracts focused on cost of care in some cases.

Perceived limitations of CIBMTR data by the payers include the lack of a "ranking" system for centers (most centers perform "as expected" or "better than expected"), and the lack of performance analysis for autologous HCT. The CIBMTR does not offer financial information that could be used to assess "value".

Payer's responses to changes in center performance are variable, as are their appeal processes. Some payers change a center's designation for a single year with performance "less than expected" in the Center-Specific Survival Analysis while others evaluate trends over several years. Some payers emphasize additional data or have peer-review panels that review center performance in the context of other program information to make decisions about continuing network designation status.

A transplant center panel discussed the impact of network requirements and the Center-Specific Survival Analysis on their programs. In general, transplant centers seek to provide the best possible outcomes for their patients. They seek consistent access for the patients and community they serve, financial stability, and transparency of intent from payers. Centers expect to be held accountable for aspects of care they can manage while acknowledging factors outside of their control. Since most allogeneic HCT are performed in academic centers, centers seek opportunity to pursue innovative approaches to HCT that advance the care of patients and extend the benefits of HCT, often as part of peer-reviewed, federally funded research expectations, without experiencing undue risk of being eliminated from payer networks based upon outcomes of innovative approaches. The Center-Specific Survival Analysis negatively impacts innovation because of the pressure to maintain high survival rates. Centers must make difficult decisions regarding who to transplant.

Changing a center's network designation has substantial impact on the center and its patients. Patients, payers, and centers seek stability. Moving centers in and out of network status affects those centers and

their patients. Potentially unintended consequences include changes in access to care for patients in a geographic region. Centers that lose designation may experience sudden and significant volume shifts, which could have long-term impact on staffing and other quality-related aspects of programs. Other centers in the same region may experience sudden and significant volume increases beyond existing capacity, which may impact wait times for HCT as well as existing processes and procedures that are associated with quality at the "expanding" center. Transient shifting of patient volumes presents inconsistency for payers, physician networks, transplant centers, and the patients they serve.

Recommendations:

- With guidance from the ASBMT Committee on Quality Outcomes and other stakeholders, continue to refine data elements to account for "high-risk" or innovative transplant approaches in the risk adjustment model.
- Help payers recognize the unintended consequences upon transplant centers and patients of making decisions about program designation based upon a single year of performance "below expected" according to the CIBMTR Center-Specific Survival Analysis.

4. Facilitating possible future outcomes metrics for public reporting

An additional measure of quality suggested at the 2014 Center Outcomes Forum for consideration by the CIBMTR was overall survival (risk-adjusted) at time points beyond one year. The CIBMTR completed a pilot study to analyze three-year overall survival, using the data available for the 2013 Center-Specific Survival Analysis, which includes HCTs performed between 2009 and 2011 with additional follow-up through three years.

The preliminary conclusions of the pilot analysis are:

- A substantial number of centers did not achieve 90% completeness of follow-up at three years after HCT, hence the pilot was analyzed using centers with 80% completeness.
- Among those factors tested in the current one-year risk-adjusted survival model, those significantly associated with three-year risk-adjusted overall survival are very similar.
- Center performance rating for one-year and three-year overall survival are similar for 90% of centers.

There are several limitations inherent in collecting and analyzing data for three-year overall survival:

- There is a significant delay between years of HCT and reporting for this outcome because of the need for three years of follow-up data; this outcome represents a lagging indicator for less contemporary transplant recipients.
- Centers must report follow-up on patients for at least three years after the HCT.
- Patients may have limited access to the HCT center for longer-term follow-up, reducing the center's ability to influence outcomes.
- This outcome does not address "value" or cost.

It was suggested to analyze more contemporary cases using less follow-up, but this would not produce valid results.

Some payers expressed interested in this analysis but would not use it for COE criteria. The results could be of value to centers in understanding their outcomes and making changes within their program. There was general consensus this outcome is not ready for public reporting due to issues with follow-up and coordination of care.

Recommendations:

- Develop a process to routinely analyze three-year overall survival. The results should be made available to centers for QI purposes.
- GVHD is a very important factor in longer-term survival after HCT. CIBMTR should consider providing additional information about incidence of GVHD for centers' QI efforts.

Appendix A: Attendees of Center Outcomes Forum

Full Name	Organization	Representation
Kenneth Luurs, MBA, CAE	American Society for Blood and Marrow Transplantation	ASBMT
Christopher Bredeson, MD, MSc	American Society for Blood and Marrow Transplantation / The Ottawa Hospital	ASBMT, HCT Center
Robert Plovnick	American Society of Hematology	ASH
Linda Burns, MD	NMDP/Be The Match	CIBMTR
Jeffrey Chell, MD	NMDP/Be The Match	CIBMTR
Pintip Chitphakdithai, PhD	NMDP/Be The Match	CIBMTR
Steve Spellman, MS	NMDP/Be The Match	CIBMTR
Patty Steinert, PhD, MBA	CIBMTR/MCW	CIBMTR
Mary Horowitz, MD, MS	CIBMTR/MCW	CIBMTR, HCT Center
J. Douglas Rizzo, MD, MS	CIBMTR/MCW	CIBMTR, HCT Center
Ellen Denzen, MS	NMDP/Be The Match	CIBMTR, Patient Advocate
Molly McCormick	NMDP/Be The Match	CIBMTR, Patient Advocate
Elizabeth Murphy, EdD, RN	NMDP/Be The Match	CIBMTR, Patient Advocate
Kara Wacker, MBA, RAC	Foundation for the Accreditation of Cellular Therapy	FACT
Robyn Ashton, RN MSN	Health Resources and Services Administration	Government agency
Peggy Appel, MHA	Northwest Marrow Transplant Program	HCT Center
Staci Arnold, MD, MBA, MPH	Emory University	HCT Center
Rocky Billups	Sarah Cannon BMT Program	HCT Center
Rachel Cook, MD, MS	Oregon Health & Science University	HCT Center
Tonya Cox	Sarah Cannon BMT Program	HCT Center
Christopher Dandoy, MD	Cincinnati Children's Hospital Medical Center	HCT Center
Clint Divine, MBA, MSM	The University of Kansas Hospital	HCT Center
Amy Emmert	Dana-Farber Cancer Institute	HCT Center
Sergio Giralt, MD	Memorial Sloan Kettering Cancer Center	HCT Center
Gary Goldstein	Stanford Health Care	HCT Center
Nandita Khera, MD	Mayo Clinic	HCT Center
Krishna Komanduri, MD	University of Miami	HCT Center
C. Fred LeMaistre, MD	Sarah Cannon BMT Program	HCT Center
Navneet Majhail, MD, MS	Cleveland Clinic	HCT Center
Richard Maziarz, MD	Oregon Health & Science University	HCT Center
Alyssa McMahon, MD	Memorial Sloan Kettering Cancer Center	HCT Center

Full Name	Organization	Representation
Shin Mineishi, MD	Penn State Health	HCT Center
Leslie Parran, MD, RN, AOCN	University of Minnesota	HCT Center
Michael Rabin, MD	City of Hope	HCT Center
Edmund K. Waller, MD	Emory University	HCT Center
Kent Walters	The University of Texas MD Anderson Cancer Center	HCT Center
Daniel Weisdorf, MD	University of Minnesota	HCT Center
William Wood, MD, MPH	University of North Carolina at Chapel Hill	HCT Center
Amy Richards	Vizient, Inc.	Health Care Services/ Analytics Company
Bonnie Anderson, FLMI, HIA, MHP, FAHM	LifeTrac Network	Payer Group
Melinda Baxter	RGA Reinsurance Company	Payer Group
Cavella Bishop	DC Government	Payer Group
Anthony Bonagura, MD	Optum	Payer Group
Ruth Brentari	Kaiser Permanente	Payer Group
James Coates, MD	Aetna	Payer Group
Francesca Cook	Regenxbio	Payer Group
Stephen Crawford, MD	Cigna	Payer Group
Kristen Edsall	NMDP/Be The Match	Payer Group
Stephanie Farnia, MPH	NMDP/Be The Match	Payer Group
Mary Kay Gilbert	PartnerRe	Payer Group
Adriana Mariani, RN, BSN, MPM	Cigna LifeSOURCE Transplant Network	Payer Group
Wendy Marinkovich, RN, MPH	Blue Cross Blue Shield Association	Payer Group
Patricia Martin, RN, BSN	Anthem, Inc.	Payer Group
Zach McGillis	Optum	Payer Group
Susan McKevitt	LifeTrac Network	Payer Group
Brennan McNally	Optum	Payer Group
Robert Moravec	LifeTrac Network	Payer Group
Ronald Potts, MD	Interlink Health Services	Payer Group
Debbie Reichow	AHCCCS (AZ State Medicaid)	Payer Group
Michelle Ruppert	Optum	Payer Group
Alice Sanders	Medica	Payer Group
Kathy Marshall, RN	Sanofi	Pharmaceutical Company
Michael Boo, JD	NMDP/Be The Match	Staff
Karen Dodson, CHTC	NMDP/Be The Match	Staff
Carol Doleysh	CIBMTR/MCW	Staff
Joyce Fitzgerald	NMDP/Be The Match	Staff

Full Name	Organization	Representation
Sue Logan, CCRP	NMDP/Be The Match	Staff
Christa Meyer, MS	NMDP/Be The Match	Staff
Amy Ronneberg	NMDP/Be The Match	Staff
Alicia Silver, MPP	NMDP/Be The Match	Staff
Jeff Wren	NMDP/Be The Match	Staff