

Be The Match Accelerates Life-Saving Transplant Services by Prioritizing Observability with AppDynamics



About Be The Match

For the thousands of people diagnosed every year with life-threatening blood cancers like leukemia and lymphoma, a cure exists. Over the past 30 years Be The Match®, operated by the National Marrow Donor Program® (NMDP), has managed the largest and most diverse blood stem cell registry in the world. We work every day to save lives through cellular therapy.



Challenge

Deliver 24x7 application availability to support world's largest bone marrow registry

As For more than 30 years, Be The Match®, operated by the National Marrow Donor Program® (NMDP), has been a bedrock of support and hope for the hundreds of thousands of Americans diagnosed with blood cancers like leukemia and lymphoma.

Every three minutes, someone is diagnosed with a blood cancer and can happen to anyone, at any time — from [14 month-old leukemia patient](#) to two-time [myelodysplastic syndrome \(MDS\) survivor](#).

In response, Be The Match® operates the largest and most diverse bone marrow and blood stem cell transplant registry in the world in support of its mission to save lives through cellular therapy. But operating a registry of that size and importance comes with significant technical and operational challenges.

“Running a global transplant registry isn’t simply a matter of people volunteering to become a donor. There’s a complex orchestra of systems and platforms that support the donors, patients and hospitals, to help identify the closest DNA typing, at the right time, in the right location,” says Todd Moss, Senior Manager of Platform Services at Be the Match. “The role of our digital team is to deliver 24x7 services running at peak performance so our organization can fulfill its promise of saving lives.”

Key Benefits

- Improved application, data, and service availability to drive an increase in lives saved
- Slashed application downtime by 30% and critical infrastructure interruptions by as much as 75% year over year
- Faster root cause identification and collaboration for shorter resolution times with fine-tuned dashboards and alerts that enabled immediate, targeted solutions

Solution

Improving processes to save time and lives

Across the country there are hundreds of transplant centers dedicated to treating patients diagnosed with blood cancer. Physicians in those facilities responsible for determining whether a bone marrow transplant is the right course of treatment are also responsible for searching the Be The Match® registry for potential donor matches, prioritizing location and availability.

With millions of donors currently on the registry, the organization’s role is to connect physicians, donors, and future survivors efficiently, reliably, and with laser-like precision.

Time to marrow transplantation is vital to delivering life-saving treatment for critically ill patients, and any interruption or service degradation anywhere in the Be The Match® service environment could create delays that jeopardize transplant opportunities. Not only must the registry search and other critical applications work flawlessly, but the donor experience — and all the systems and databases that make it fast and easy for potential donors to register and match with cancer patients — must also be seamless and easy.

Eager to reduce technical glitches and take a more proactive approach to optimize the performance and availability of its most critical applications, Be The Match® adopted AppDynamics to gain real-time performance visibility into various facets of its operation — from the donor registration website and transplant center donor search application to the enterprise service bus middleware that supports it all.

To support the organization's global mission, Moss's team wanted real-time visibility and in-depth performance measurements across essential customer-facing applications, core network components, and infrastructure from a single solution to substantially improve the stability and reliability of its donor-patient ecosystem.

Because even a moment of downtime in any part of its operation can impact the survival outcome of any and every patient, the team uses AppDynamics dashboards to monitor and manage critical service level thresholds and empower subject matter experts on each business team to assert ownership over the operation and to prioritize critical applications and services.

"AppDynamics has been a game changer for us because it gives each application team the granular, actionable insights, dashboards, and automated alerts they need to proactively identify and address potential service issues before they become full-blown service problems that affect other parts of the operation," Moss explains. "Executives, developers and support teams can also use targeted dashboards to gain a broader, end-to-end perspective of the whole environment that we review each month to make sure everyone is pulling in the same direction and alert individual teams of potential issues with Tier 1 applications they may have missed so that nothing slips through the cracks."

A high-functioning infrastructure is vital to a positive, engaging experience that makes donors like a [college cheerleader](#) feel good about their decision to help save a stranger's life and spread the word to friends and family to participate — especially among less well-represented populations — and grow the donor base.

It's also essential to executing timely communications and coordinating materials for lifesaving transfusions. Now, Be the Match®-registered physicians can reliably access a list of potential donors, including searching for minority and other harder-to-match participants, knowing they're seeing the entirety of the available donor set and with total confidence in the available information.

Moss says their monitoring initiatives not only promote greater agility and responsiveness to keeping the platforms running efficiently, but it also fosters a culture



of accountability and improved collaboration across the organization. "Everything we do is in service of saving lives, which means that everyone has to be fully on board with what we're doing and their role in it," Moss says. "AppDynamics gives each person the tools they need to do their jobs to the best of their abilities and gives everyone else the transparency to hold each other accountable for pulling their weight."



Benefits

Eliminating performance obstacles to save lives

According to Moss, AppDynamics has been a transformational force in the way Be The Match® views and operates its most important IT systems and applications. The real-time, end-to-end service visibility has helped the team reduce service interruptions by nearly 75%, along with a 30% reduction in downtime, year over year, by slashing mean time to discovery (MTTD) and pinpointing exactly where an issue lives, exactly when (or before) it happens.

More importantly, it's helped Be The Match® eliminate obstacles, enabling improvements in the bone marrow transplant process for donors and patients. "AppDynamics allows us to see how every piece of the puzzle fits together and how each component across both the donor- and patient-facing systems is working," Moss says. "Last year we helped save more than 6,000 lives. We are on track to help even more patients find their life-saving donors and provide support through the entire process and the increased performance and reliability we get with AppDynamics will play a big part in that."

See your applications like never before

Learn more about how our solutions can meet your needs. Whether you're ready to get started or still have more questions, we'd love to hear from you.

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