NATIONAL KIDNEY REGISTRY TEAMS WITH RACKSPACE TO MAKE MIRACLE MATCHES

To save and improve the lives of people facing kidney failure, the National Kidney Registry is dedicated to increasing the quality, speed, and number of living donor transplants in the world. That mission mandates zero downtime.

The National Kidney Registry (NKR) is in the business of making miracle matches—facilitating kidney swaps between paired donors and paired recipients across the country. It's all done via paired exchange donation in which a donor gives his or her kidney to another recipient in exchange for a compatible kidney for the donor's loved one.

The NKR team works with a voluntary network of transplant centers and hospitals to help them understand how to utilize the kidney matching system, allowing them to maximize patient transplants. While this process takes place, the systems that power the kidney recipient/donor database must be up and running—with absolutely zero downtime.

"Our logistical functions must remain up at all times, especially on the days when transplants are taking place," says Joe Sinacore, director of Education & Development at the NKR. "There are surgeons and nurses waiting on the other end for that kidney to show up, and need to know *exactly* when it will show up— our system cannot go down. There is a sense of trust that gets created with the National Kidney Registry working with the participating hospitals."

TECHNOLOGY FUELS THE EXCHANGE

The logistics behind such an exchange are complex, and offer no room for error. So it's no surprise that the National Kidney Registry built its logistical management system on technology. That infrastructure powers, secures, and stores its invaluable kidney recipient/donor database, facilitating on average 30 to 40 kidney transplants each month.

"Without technology, none of this could happen," says Sinacore. "We could never have done this 20 years ago. But, because of technology, we can find the best matches for patients in need who have donors, getting them matched and transplanted as quickly as possible."

GROWTH LEADS TO HOSTED OPTION

The national registry was originally launched with an on-premises solution, but the team realized an in-office server could not sustain long-term growth. NKR decided to move to a more robust managed hosting solution.

In July 2012, NKR first moved its email system to Rackspace's managed infrastructure. A few months later, Hurricane Sandy struck the U.S. Eastern seaboard, including NKR's Long Island, N.Y., location. "Had we not moved our email system over to Rackspace, we would have been out of business for a week," says Sinacore. "This really built tremendous trust between the National Kidney Registry and Rackspace to go forward from there."

Rackspace now houses the NKR database (and its front-end website), which offers connectivity to all the transplant centers. It's all done in a highly secure data facility that supports the registry's mission.

"At the end of the day, when we get to go in and record a patient as transplanted, we go to sleep at night knowing that people went home with a kidney, they got off dialysis—it's rewarding, as rewarding as it can get," says Sinacore.

To learn more about NKR's experience, view this [YouTube video](#).