



COLOR 3D HEART MODEL



HEALTHCARE | Hospitals

| **Solution:** HP Jet Fusion 580 Color 3D Printer

| **Software:** Materialise Mimics/InPrint

| **Material:** HP 3D HR CB PA12
(Strong, quality thermoplastic)

| **Medical Specialty:** Cardiovascular Surgery

Rady Children's Hospital was able to reduce surgery and medical procedure times by using 3D printed anatomical models to visualize and better understand surgery challenges. The HP Jet Fusion 580 Color 3D Printer allows for the creation of strong and durable parts, ensuring durability along the entire medical treatment process.

This heart model¹ illustrates the very complex anatomy associated with a condition called double outlet right ventricle, and helps patients and families understand the challenging corrective surgery required for this condition. The heart model provides clinicians with a better overview of the heart's anatomy, and blood vessel geometry. A white-colored version of the heart model is displayed in order to showcase the full color capabilities of the HP Jet Fusion 580 Color 3D Printer.



Data courtesy of Rady's Children Hospital

"Mayo Clinic reports that one minute of their OR (operating room) time is between \$80 and \$150, so if you can save a few minutes of operating time, that's going to be a great way to save on resources."- Justin Ryan, PhD, Director of the 3D Visualization Lab at Rady Children's Hospital.

Benefits



Improved Patient Outcome



Better Communication Between Doctors & Patients



Shorter Time in Operating Room and ICU

¹ Part thickness adjusted for showcase purposes.