**Mayo Clinic Minute**

*How 3D imaging helps doctors and patients*

<table>
<thead>
<tr>
<th>Video</th>
<th>Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td>(natural sound of 3D printer working)</td>
<td>Layer by layer, 3D printers like this one are changing the way doctors and surgeons do their jobs.</td>
</tr>
<tr>
<td>The printers are able to take two dimensional scans and make a 3D model that is identical to the patient’s own body parts.</td>
<td>Dr. Jonathan Morris helps oversee one of the 3D printer labs at Mayo Clinic, and says 3D models help surgeons better plan operations because they know exactly what to expect inside the patient’s body.</td>
</tr>
</tbody>
</table>

**JONATHAN MORRIS, M.D.**  
ANATOMIC 3D PRINTING LAB  
Mayo Clinic

00:03:06

“One, it helped educate the surgeon on where the complex anatomy and structures were, but it also helped them talk to the patient, discuss with the patient how they were going to do the surgery and what was at risk, and most patients don’t understand CT scans, MRI scans.”

Because the models help surgeons plan better, Dr. Morris says they’re able to make smaller incisions, cut down on the time patients have to be under anesthesia, and improve overall outcomes from surgery.

**JONATHAN MORRIS, M.D.**  
ANATOMIC 3D PRINTING LAB  
Mayo Clinic

00:06:15

“So anything we can give them information-wise that allows them to be more confident, allows them to have less invasive surgeries while still understanding that whole big picture of the patient while they’re operating in smaller incisions, that became
incredibly useful.”

| For the Mayo Clinic News Network, I'm Ian Roth |   |