B-Line Medical has helped design over 400 simulation centers worldwide and learned a lot of lessons along the way. There are hundreds of critical decisions to be made in designing a state-of-the-art simulation center including room layout, equipment selection and location, HVAC capacity and noise control, wall plates, cabling, and network. B-Line Medical's experience and expertise is unmatched in the industry and can be leveraged for any simulation center project, regardless of its size and scope.

B-Line Medical’s years of audiovisual expertise and industry relationships take the guesswork out of simulation center audiovisual design and vendor selection. Work with your preferred local vendor, or let us handle the entire project for you. By optimizing your simulation center’s design, workflow and AV equipment from the start, you can save time and money from having to make expensive changes later on. B-Line Medical products support a range of audiovisual technology to match any need or budget.

“Tap into 450+ centers worth of experience”

**Simulation Center Design Consulting**

Our design services include:

- Design Phase Consulting
- Architectural firm selection and design review
- Floorplan review and analysis
- Audiovisual and network design
- Signal flow diagrams and rack elevations
- Bid Phase Consulting
- Equipment selection and placement
- Budget analysis and refinement
- Requirements gathering and detailing
- Access to B-Line Medical’s audiovisual partners
Examples of simulation center design best practices:

- Sound isolation between rooms is important. Use two layers of sheetrock on one wall side of shared space with insulation in between. Walls should be built slab to slab (hard floor to hard ceiling).

- Try to keep HVAC mechanicals (fans / blowers / compressors, etc.) away from areas where recording will take place, as this could interfere with captured sound; ideally, a low velocity HVAC system should be used to minimize sound impact on microphones.

- Mount domed ceiling cameras in drop ceiling tiles and aim to have full ceiling tiles in the corners of each room to allow for ease of camera movement and maximum camera placement flexibility; provide extra cabling to ceiling cameras for ease of movement.

- Top of door to ceiling should have a minimum of one foot clearance so as to not hit camera domes when opening.

- Ensure that mock OR, ER, ICU, etc. door openings are wide enough to easily allow for the movement of gurneys and / or simulators that you currently possess or may purchase in the future.

- XGA / DVI plates near the head wall or on the OR boom can have additional composite video and audio inputs to capture video enabled otoscopes or endoscopic cameras; it is recommended to have a DVI capture point on the OR boom.

- Using Cat 6 cabling and IP cameras to transmit video is a growing trend. Consult with the selected AV integrator to see if this is an option, as it could significantly reduce installation charges.

- Ideally each network location will have a network connection dedicated to the simulation network, and one dedicated to general institution network; firewall rules will need to be coordinated with the institution’s IT department to clarify institution access and external access restrictions.

- Network cabling dedicated to the simulation center should have a different color code than standard network cabling.

For more information about simulation center design consulting contact B-Line Medical at info@blinemedical.com or call 1.888.228.3838 x1 for more information