MedVision
为生命而创新
www.medvisiongroup.com.cn

LapVision Hybrid
腹腔镜模拟器

MedVision

Patient / Surgical Simulator
患者/手术模拟器

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Simulation in laparoscopic skills
腹腔镜技术模拟

LapVision 腹腔镜模拟器

The **LapVision** simulator has been designed for surgeons and a wide range of medical specialists to safely learn, refine and retain laparoscopic skills. From basic to advanced levels of operation, LapVision provides a comprehensive educational platform that tests technical skills in a variety of surgical scenarios. Complete with a library of educational modules of common laparoscopic procedures, LapVision can be easily integrated into any surgical curriculum or training program.

LapVision腹腔镜模拟器专为外科医生和各类医学专家设计，实现安全地学 习、提升和保持腹腔镜技术。 从基本操作到高级操作，LapVision提 供了全面的教育平台，在各种手术场景中测试技能。LapVision配有 完整的常见腹腔镜手术的教育模块库，可轻松应用到任何外科课程或 培训计划中。

Line them up in your simulation centre then wheel them away when not in use!

- Convenient all-in-one structure
- Adjustable workspace height
- Plug and play
- Mobile

您可在模拟中心将其排成一行， 在不使用的时候把它们推走！

- 便捷的多位一体结构
- 可调节工作区高度
- 即插即用

LapVision SMART
智能版

The compact design and portable nature of LapVision SMART makes it the perfect solution not just for simulation centres but also workshops and seminars. Simply place it on the table and begin!

- Easy to set-up
- Expandable with additional virtual trocars – up to five in total

LapVision 智能版设计紧凑、携带便捷，不仅 是模拟中心的完美解决方案，也是各类研讨会 的完美解决方案。只需把它放在桌子上，您就 可以开始使用！

- 易于安装
- 可与另外的虚拟套管针连接-最多可连5个

LapVision Standard
标准版

Instrument Simulation

- Realistic, wireless instruments that resemble their real counterparts
- Magnetic haptic feedback with true-to-life tissue resistance
- Zero delay tracking

仪器模拟

- 逼真的无线仪器，与真实设备无异
- 磁性触觉反馈，具有逼真的组织电阻
- 零延迟跟踪

Virtual OR

- 3D Anatomy Atlas
- Video hints, step-by-step instructions and video courses
- Complications and pathologies
- Free mode of operation
- Videos from real surgeries

虚拟手术室

- 三维解剖图谱
- 视频提示、分步指导和视频课程
- 并发症和病理
- 自由操作模式
- 真实手术录像

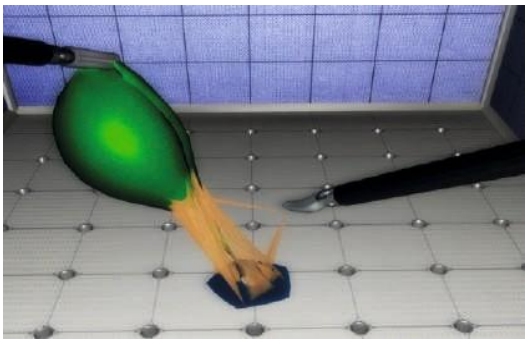
Educational Features

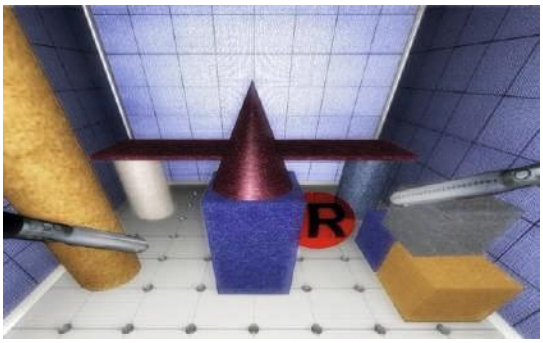
- Individual user profiles
- Detailed automatic registration of all actions performed during exercises
- Course for basic skills training
- Additional suturing modules
- Extensive library of modules
- Screenshots and video recording
- Additional training modules can be added at anytime

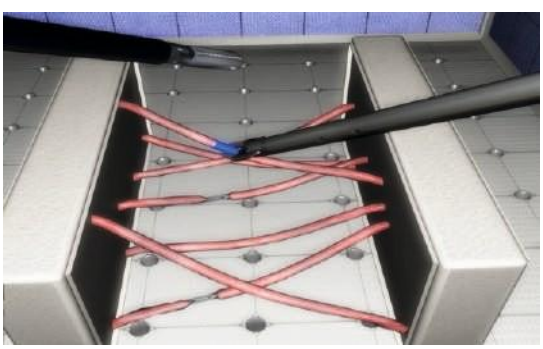
教育特色

- 个人用户表
- 自动记录练习中所有操作详情
- 基本技能训练课程
- 附加缝合模块
- 丰富的模块库
- 截图和录像
- 可随时添加其他培训模块

Basic Skills
基本技能







Refining dexterity in instrument handling

- Control of camera with multiple viewing angles
- Vessel clipping and capturing
- Electrocoagulation operating skills
- Endoscopic scissor handling
- Suturing
- Knot tying
- The task on on 3-D coordination, grip of the instruments, movement and rotation of objects

提升仪器操作的灵活性

- 通过多角度调节控制摄像头
- 血管夹持与捕获
- 电凝术操作技能
- 内窥镜剪刀处理
- 缝合
- 打结
- 完成三维协调、仪器的握持、物体的运动和旋转任务

Mastering use of laparoscopic instruments and camera
掌握腹腔镜器械和照相机的使用方法

- Our proprietary Magnetic Haptic System provides realistic feedback
- Magnetic Haptic System is also more reliable than mechanical versions
- Wireless instruments can be completely removed from the port
- Instruments use integrated gyroscopes for easy tool selection and swap
- 我们专有的磁性触觉系统 可提供给用户逼真的反馈
- 磁性触觉系统也比机械版 本更可靠
- 无线仪器可完全从端口移除
- 仪器采用集成陀螺仪，便于 选择和更换工具

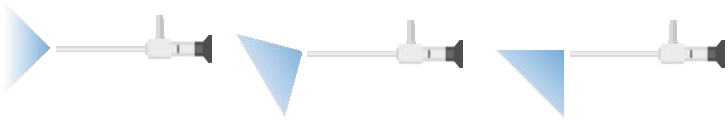
Highly realistic instruments support a seamless transition of skills to real surgical practice
高度逼真的器械支持技术有助于无缝过渡到真正的手术实战中

Laparoscope control

- Three camera angles: 0°, 30°, 45°
- Endocamera use training
- Realistic camera functions

腹腔镜控制

- 三种摄像角度：0°、30°、45°
- 内窥镜相机使用培训
- 逼真的相机功能



Virtual instruments

Extend the learning and practice with a variety of virtual instruments.

- Easy switch between instruments
- Instrument freeze functions

Forceps

Endobag Extractor

Coagulator

虚拟仪器

利用各种虚拟仪器扩展学习和实践。

- 轻松切换各类仪器之间
- 仪器冷冻功能

钳子

内窥镜手术用取物袋提取器

凝结剂

Over 20 different virtual instruments are available that are commonly used in laparoscopic surgeries. We can add new instruments by arrangement.

腹腔镜手术中常用的虚拟仪器有20多种。我们可按序增加新的仪器

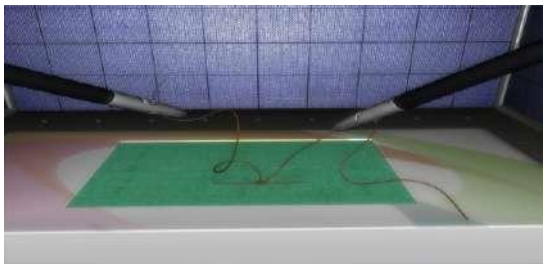
Library of Laparoscopic Modules
腹腔镜模块库

Certain important skills in laparoscopy

- The task on endoclip applicator control
- The task on endoscopic scissors control in examination mode
- The task on endoscopic scissors control in training mode
- The task on movement of objects on pins
- The task on movement of pins

腹腔镜检查中的几个重要技能

- 控制内窥镜施夹钳
- 考试模式下控制内窥镜剪刀
- 培训模式下控制内窥镜剪刀
- 在销钉上移动物体
- 移动销钉

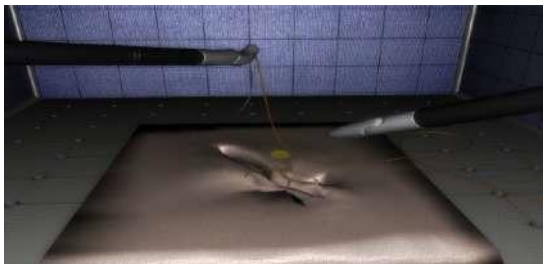


Complex of training tasks on suturing and knotting

- Interrupted (loop) suture for curved incision
- Interrupted (loop) suturing technique
- Square knot tying for right/left hand
- Surgeon`s knot tying for right/left hand

缝合打结训练任务的复杂性

- 弯曲切口间断（环）缝术
- 间断（环）缝合技术
- 右/左手打方形结
- 外科医生的右手/左手打结

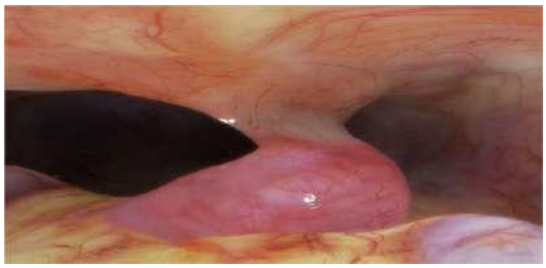


Special critical skills of suturing and knotting

- Mattress suturing technique
- Square knot tying on a thread without a needle
- Surgeon`s knot tying on a thead without a needle
- Suturing by right-hand / left-hand needle
- Training of skills of needle orientation in the need-holder
- Z-shaped suturing technique

缝合打结的特殊关键技能

- 褥式缝合技术
- 不用针在线上打方结
- 外科医生不用针在线上打结
- 右/左针缝合
- 持针器针头定位技能培训
- Z形缝合技术



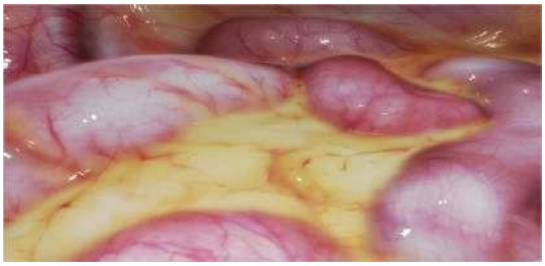
Acute adhesive small bowel obstruction

Acute adhesive small bowel obstruction in the right/left area

急性粘连性小肠梗阻

- 右/左部位急性粘连性小肠梗阻
-

Library of Laparoscopic Modules
腹腔镜模块库

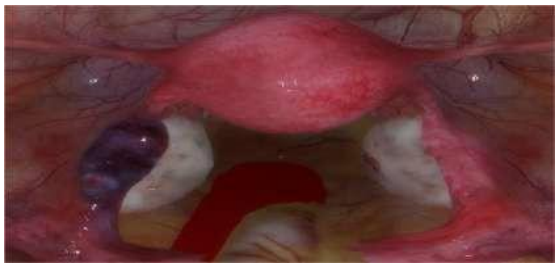


Diagnosis of the abdominal cavity

- Diagnosis of appendicitis
- Diagnosis of cholecystitis
- Diagnosis of ectopic pregnancy
- Diagnosis of ovarian cysts
- Diagnosis of perforated duodenal ulcer

腹腔诊断

- 阑尾炎诊断
- 胆囊炎诊断
- 异位妊娠诊断
- 卵巢囊肿诊断
- 十二指肠溃疡穿孔诊断

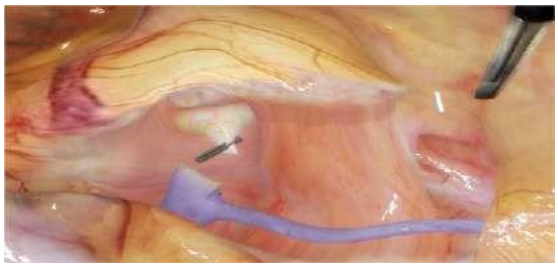


Skills in gynecological surgery

- Preventive oophorectomy
- Tubal sterillization
- Tubectomy with abdominal pregnancy in ampullar area of the right/left fallopian tube with active bleeding
- Tubectomy with abdominal pregnancy in ampullar area of the right fallopian tube in ampulla of the right tube
- Tubotomy with abdominal pregnancy in isthmic area of the right fallopian tube

妇科手术技能

- 预防性卵巢切除术
- 输卵管绝育术
- 右/左侧输卵管壶腹腔妊娠行输卵管切除术并伴有活动性出 血
- 右侧输卵管壶腹区输卵管切除术伴腹腔妊娠右侧输卵管壶 腹
- 右输卵管峡区输卵管切开术伴腹腔妊娠

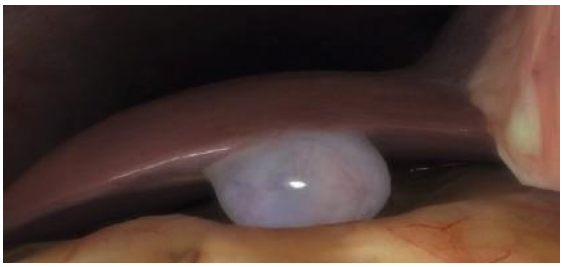


Skills in laparoscopic nephrectomy

- Clipping and intersection of the ureter
- Clipping and intersection of the vessels
- Mobolization of the descendig colon
- Removal of the kidney

腹腔镜肾切除术技能

- 输尿管夹闭与交叉
- 血管的夹闭与交叉
- 降结肠移动
- 肾脏摘除术



Important skills in laparoscopic cholecystectomy

- Traction and dissection of the peritoneum
- Dissection of structures in Calot's triangle
- Clipping and cutting of cystic artery and cystic duct
- Mobilisation of the gall bladder

腹腔镜胆囊切除术的重要技能

- 腹膜牵引剥离术
- 胆囊三角结构解剖
- 胆囊动脉和胆囊管夹闭切断术
- 胆囊移动

Execution of hysterectomy

- **Execution of total hysterectomy**
- **Subtotal hysterectomy**

子宫切除术

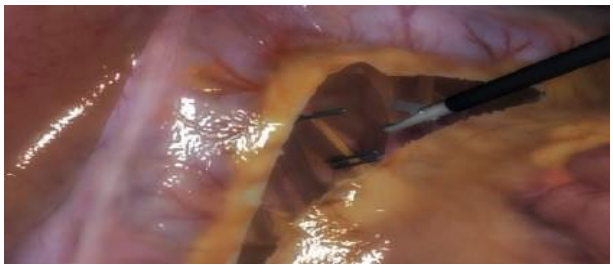
- 全子宫切除术
- 子宫次全切除术

Execution of laparoscopic appendectomy

- Acute phlegmonous appendicitis in pregnant woman
- Acute phlegmonous appendicitis with e usion in the area of the appendix
- Acute phlegmonous appendicitis with local peritonitis
- Acute phlegmonous appendicitis with retrocecal location of the appendix
- Acute phlegmonous appendicitis
- Gangrenous appendicitis with e usion and local peritonitis

腹腔镜阑尾切除术

- 孕妇急性蜂窝织炎性阑尾炎
- 急性蜂窝织炎性阑尾炎伴阑尾区渗出
- 急性蜂窝织炎性阑尾炎伴局限性腹膜炎
- 急性蜂窝织炎性阑尾炎伴盲肠后位阑尾
- 急性蜂窝织炎性阑尾炎
- 坏疽性阑尾炎伴渗出和局限性腹膜炎

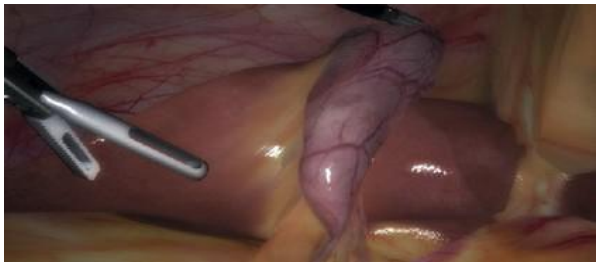


Sigmoid colon resection

- Cutting vessels, mobilisation and intersection of the sigmoid colon
- Anastomosis

乙状结肠切除术

- 乙状结肠血管切开、移动和交叉
- 吻合术



Full procedure of laparoscopic cholecystectomy

- Planned cholecystectomy with acute catarrhal cholecystitis
- Cholecystitis with phlegmonic cholecystitis

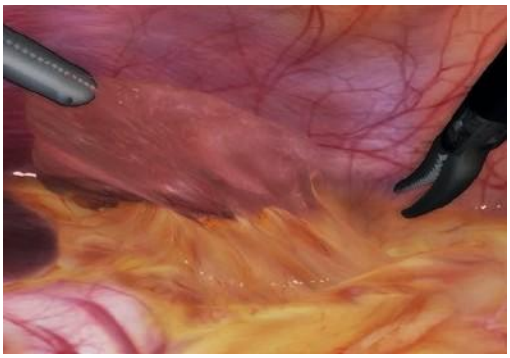
Urgent cholecystectomy with gangrenous cholecystitis with local peritonitis

腹腔镜胆囊切除术全过程

- 急性卡他性胆囊炎计划性胆囊切除术
- 胆囊炎伴化脓性胆囊炎
- 坏疽性胆囊炎伴局限性腹膜炎的急症胆囊切除术

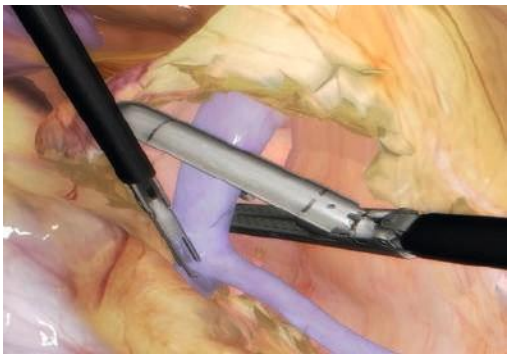
Library of Laparoscopic Modules
腹腔镜模块库

Immersive anatomies
沉浸式解剖

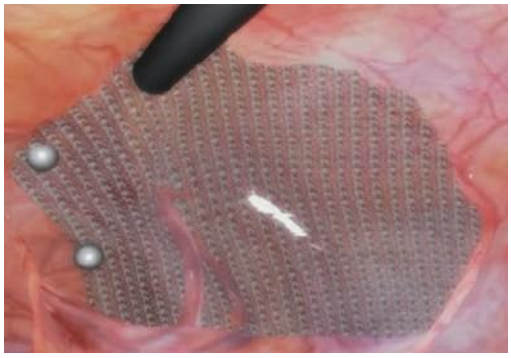


Splenectomy
脾切除术

Salpingo oophorectomy
输卵管卵巢切除术



Nephrectomy
肾切除术



Hernioplasty
疝根治术

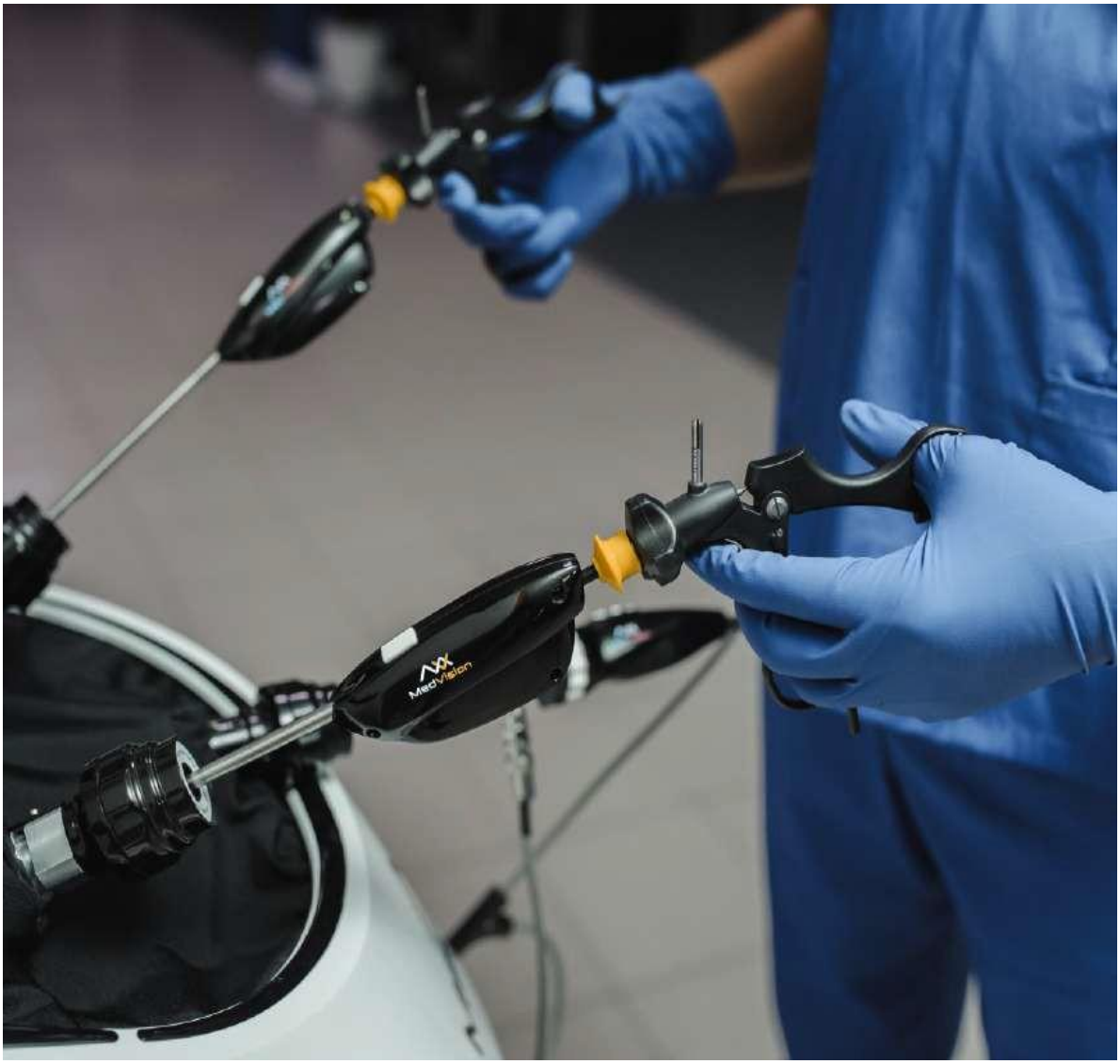
•Internal bleeding that occurs during the exercise will lead to changes in the patient's condition including possible death;
•When coagulating or dissecting, the tissuesof the internal organs change and react accordingly;
• Realistic fluid physics;
•The abdominal cavity is operable, presenting the perfect learning opportunity to make surgical mistakes and then correct them.

•运动期间发生的内出血将导致患者病情变化，甚至可能引起死亡；

•在进行凝血或解剖操作时，内脏器官的组织会发生相应的变化和反应；

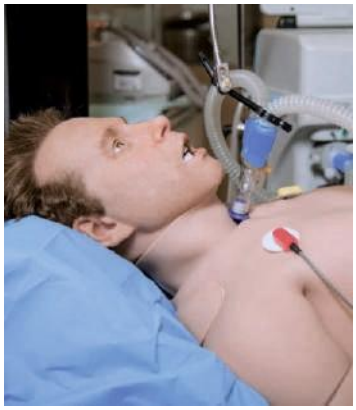
• 真实流体质感；

•可在腹腔中进行手术，这为学习者提供了完美的学习机会，可以发现并纠正手术中的错误。



Internal organs and abdominal cavity are modelled using footage from real surgeries
利用真实的手术录像对内部器官和腹腔进行建模

Have you seen our patient simulators? 看看我们不同适用年龄阶段的患者模拟器



Leonardo
成人模拟器

Mia
新生儿模拟器

Arthur
儿童模拟器

MedVision is an innovative and fast-growing company that specializes in designing and manufacturing high-fidelity medical simulators and having more than nine years of history in the development of medical simulation equipment.

MedVision是一家创新和快速发展的公司，专业设计和制造高保真医疗模拟器，在医疗模拟设备的开发方面拥有超过9年的历史。

服务

我们知道您在教育项目上做出了巨大的投资，因此我们设计了充分的服 务解决方案，从选择正确的模拟器到将其完全集成到您的模拟项目中， 我们在每一个步骤都提供了帮助。

无论是产品安装、预防性维护、故障排除还是维修，我们的团队都将帮助您优化模拟器的全部功能，帮助您高效地实现项目的目标。

有关我们服务方案的进一步信息，请联系您的区域代表。

联系我们

请发送电子邮件与当地区域代表联系：
poyton@poyton.cn

作为一家国际公司，**MedVision**一直致力于通过模拟促进医疗保健领域的优质教育发展。我们利用创新设计和尖端技术打造各种模拟器，包括成人、儿童、新生儿和手术模拟器。欲了解更多关于我们产品的信息，请联系您当地的区域代表。

销售查询：

大中华区域： 0086-15921959878/0086-15901939090 Email: poyton@poyton.cn

全球，日本
+8 (104) 571-66497
mail@medvision.jp

欧洲
+43 (664) 414-8288
sales@mse-group.co

美国
+1 (888) 584-7119
sales@medvisiongroup.com

独联体、中东、非洲
+7 (843) 227-4063
sales@medvisiongroup.com