**MEDACTA EDUCATION PROGRAM**

At Medacta, the surgeon is never alone. The M.O.R.E. (Medacta Orthopedic Research and Education) Institute has created a comprehensive, personalized educational program which supports the surgeon in the integration of the MySpine navigation platform into their practice.

- **Reference Center**: You will have the opportunity to visit a Reference Center and attend live MySpine surgeries
- **Learning Center**: The Learning Center offers the opportunity to attend a MySpine workshop, meet experienced surgeons and discuss the clinical and economic benefits of the MySpine technology
- **Support**: Upon request, you will receive the assistance of an experienced Reference Surgeon to attend your first surgery in your own hospital
- **Continuous Education**: You can continue your education through MySpine user meetings, M.O.R.E. International events, Reference Center visits and other educational tools

Simply contact Medacta and we will create a personalized education program that is right for you!

**COMPLETE NAVIGATION PLATFORM**

The MySpine navigation platform combines pre-operative planning, intra-operative navigation, and spinal hardware to provide a comprehensive suite of tools for surgeons looking to incorporate custom spine surgery into their practice.

**PATIENT MATCHED NAVIGATION IN SPINE SURGERY**

MySpine is a patient matched navigation platform which helps make personalized spine surgery viable with the patient-specific guides and pre-operative planning.

The core value proposition of the MySpine platform is:

- **PATIENT SAFETY**
- **CLINICAL OUTCOMES**
- **HEALTHCARE SUSTAINABILITY**
- **PERSONALIZED MEDICINE**
PATIENT SAFETY

Medacta develops technologies with the patient in mind. For this reason, Medacta developed a proprietary algorithm for capturing a low-dose CT scan that is used to create the MySpine navigation guides with a fraction of the radiation exposure of competitive navigation systems.

Comparison of conventional and competitors technique irradiation vs. MySpine

<table>
<thead>
<tr>
<th>Effective radiation dose [mSv]</th>
<th>O-Arm (Obese patient) [a]</th>
<th>O-Arm (Slim patient) [c]</th>
<th>Common CT [d]</th>
<th>Radiography (X-ray)-Spine [f]</th>
<th>MySpine CT [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>80.9</td>
<td>32.4</td>
<td>37.14</td>
<td>1.5</td>
<td>0.9</td>
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<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td>0.9</td>
<td>3.1</td>
</tr>
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</table>

CLINICAL EFFICIENCY

The MySpine navigation platform is able to provide a patient-specific guided surgery in a streamlined process within 2 weeks from start to finish. The six-step process involves developing a three-dimensional model of the patient’s anatomy and pre-operative plan from a single low-dose CT scan.

CLINICAL OUTCOMES

The MySpine navigation platform could help facilitate:

- Reduced tissue and muscle sparing through a single, minimally-invasive midline incision [1, 2, 3]
- Reduced radiation exposure by minimizing intra-operative radiographic imaging through the utilization of pre-operative planning and guided navigation [11]
- Reduced operational time and blood loss by minimizing intra-operative surgical steps [3, 11]
- Improved intra-operative screw trajectory, placement, and accuracy with patient-specific surgical guides [5, 6, 7, 8, 10, 12]
Medacta's mission is to transform the patient experience by advancing surgical approaches, implants and instruments through responsible innovation and meticulous design in **joint replacement**, **spine surgery** and **sports medicine**. Medacta is a unique company in its field, as it is the only one founded by a patient. It follows the experience of the Founder Alberto Siccardi, whose own journey as a patient convinced him of the importance of pioneering a new approach to joint replacement.

Established in 1999, Medacta has leveraged its orthopedic expertise and comprehensive understanding of the human body to develop the **“MySolutions” technology**, which offers surgeons personalized pre-operative planning and implant placement methodologies by creating advanced personalized kinematic models and 3D planning tools.

Since 2009 a team of engineers has collaborated with international surgeons to develop innovative solutions for the treatment of various spine pathologies. The MySpine platform, along with MC-Midline Cortical guides, is a **3D printed patient matched solution** that, together with the M.U.S.T. Screw System, the MectaLIF Ti-coating family of interbody fusion devices, creates a harmonized and complete system, meeting surgeon needs and patient care expectations.

**HEALTHCARE SUSTAINABILITY**

Medacta was founded with the philosophy of creating medical devices that facilitate healthcare sustainability. This is the reason why sustainability is a fundamental pillar of our way of doing business, in both environmental, economic and social terms. This philosophy translates into guidelines and internal regulations that guide our daily decisions and actions.

MySpine embodies this philosophy while providing a comprehensive navigation system with the following advantages over competitive systems:

- No capital investment is required
- No recurring maintenance fee is required
- No restrictive vendor contract is required
- Low per-case disposable cost
- Viability in out-patient / surgery center environments

**REFERENCES**

[6] Matsukawa - Biomechanics of CBT (internal fro)  
[12] Chin K.R., Clinical Outcomes With Midline Cortical Bone Trajectory Pedicle Screws Versus Traditional Pedicle Screws in Moving Lumbar Fusions From Hospitals to Outpatient Surgery Centers, Clinical Spine Surgery, 2017  