Spine Tango
Surgery 2017 – Quick Start Guide
An overview of the most important changes in the Surgery 2017 form
V1.0, 21 December 2017
INTRODUCTION

This document presents the most important changes to the Spine Tango 2017 Surgery form with respect to the 2011 version. Note that this document does not include a complete list of all changes and new variables. For a direct comparison of the 2011 and 2017 forms, please refer to the “Surgery 2017 Form – Summary of Changes” document available on the module log-in pages.

Changes that only appear in the online form are indicated with the text *2017 ONLINE only. The changes for specific variables are presented under the relevant sub-form sections Admission/Pathology, Surgery, Surgical Measures, and Hospital Stay or General (for changes that are not part of a specific sub-form).

REMINDER!

All paper forms for OMR scanning must be completed with soft no. 2 pencil (ink, ballpoint pens, markers, etc. are NOT readable by the scanner).

Note: Follow-ups should be completed using the same version as the corresponding Surgery form (i.e., cases opened with the 2011 Surgery form should use the 2011 Follow-up; cases opened with the 2017 Surgery form should use the 2017 Follow-up).

GENERAL

Add Form

*2017 ONLINE only: When adding a new eform to a new or existing case, please note that for a short transition period, both the 2011 and 2017 forms will be available under the E-Form selection window. You may see the form names under the Registry Forms list in one of two formats: either study heading “SSE Spine Tango 2011” or simply “Spine Tango”. Regardless of the format, select the form with the name “Surgery 2017 (V1)” to access the correct version.

<table>
<thead>
<tr>
<th>Former selection options</th>
<th>Updated selection options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSE Spine Tango 2011: Surgery (V1)</td>
<td>Spine Tango: Surgery 2017 (V1)</td>
</tr>
<tr>
<td>SSE Spine Tango 2011: Staged (V1)</td>
<td>Spine Tango: Staged 2017 (V1)</td>
</tr>
<tr>
<td>SSE Spine Tango 2011: Follow-up (V1)</td>
<td>Spine Tango: Follow-up 2017 (V1)</td>
</tr>
</tbody>
</table>

Format

Note there is no longer an option to provide a “minimal” dataset. All variable fields are mandatory in the 2017 Surgery form unless otherwise specified.
Level of intervention

In the 2011 form, users had to first specify the Level of Intervention. In the 2011 online version, this question had to be answered before a new surgery form could be created.

In 2017, this variable is now calculated automatically based on the responses to 6 new variables for “extent of surgery” under the Surgical Measures sub-form.

*2017 ONLINE only: The calculated level of intervention appears in the online 2017 Surgery form version only.

Special case: In the case that one of the existing categories cannot be clearly determined from the “extent of surgery” selections (e.g. for an intervention over upper and lower cervical levels), “level of intervention” will be set to “other” and the user is asked to additionally specify the most appropriate level.
ADMISSION/PATHOLOGY

Main pathology
An additional choice for “Chiari” has been added as a main pathology. “Inflammation” is no longer a standard option, but could be added under “other: specify” if required.

Degenerative disease: Type of degeneration
If the main pathology is “degenerative disease”, you now have 2 options for specifying the type of degeneration (primary and secondary). You must select a single choice for the “Primary type of degeneration”. Multiple choices are possible for the “secondary type of degeneration”. The primary type of degeneration should NOT be selected again under secondary type of degeneration. If there is NO secondary type of degeneration, mark only the option “none” in this column.
Fracture/Trauma: Type of (pathological) fracture/trauma

New categories have been added to further specify the level of fracture between cervical and thoracolumbar, with separate categories for “fracture C3-C7” and “fracture Th1-L5/S1”. These levels correspond to the “AO Modifiers” under the AO Classification field.

Fracture/Trauma: AO Classification

The new AO classification has been implemented. For more details, please refer here:

AOSpine Subaxial Classification System

AOSpine Thoracolumbar Classification System

Fracture/Trauma: Osteoporotic vertebral fractures classification

A new variable has been added to capture the classification of osteoporotic fractures.

OF1 = no deformation;
OF2 = deformation of posterior wall < 1/5
OF3 = deformation of posterior wall > 1/5
OF4 = loss of vertebral frame structure (body collapse, pincer type fracture)
OF5 = injuries with distraction/rotation

ASIA impairment scale

A new variable has been added to capture the extent of spinal cord injury (SCI), defined by the American Spinal Injury Association (ASIA) Impairment Scale. If not relevant for the main pathology, mark “not assessable/applicable”.

A = Complete: No sensory or motor function is preserved in sacral segments S4-S5
B = Sensory Incomplete: Sensory, but not motor, function is preserved below the neurologic level and includes the sacral segments S4-S5 (light touch or pin prick at S4-S5 or deep anal pressure) AND no motor function is preserved more than three levels below the motor level on either side of the body.
C = Motor Incomplete: Motor function is preserved at the most caudal sacral segments for voluntary and contraction (VAC) OR the patient meets the criteria for sensory incomplete status and has some sparing of motor function more than three levels below the ipsilateral motor level on either side of the body. (This includes key or non-key muscle functions to determine motor incomplete status.) For AIS C – less than half of key muscle functions below the single NLI have a muscle grade ≥ 3.

D = Motor Incomplete: Motor incomplete status as defined above, with at least half (half or more) of key muscle functions below the single NLI having a muscle grade ≥ 3.

E = Normal: If sensation and motor function as tested with the ISNCSCI are graded as normal in all segments, and the patient had prior deficits, then the AIS grade is E. Someone without an initial SCI does not receive an AIS grade.

**Height & Weight (calculated BMI)**

On the paper forms, you must mark a value on all 3 lines (for hundreds, tens, and ones digits).

![Height & Weight](image)

*2017 ONLINE only: BMI is calculated automatically and displayed in the online form.

**SURGERY**

This section has only minor changes with respect to the 2011 form.

**Therapeutic goals**

There are new options for “bowel/bladder function improvement” and “deformity correction”.

![Therapeutic goals](image)
SURGICAL MEASURES

Extent of surgery
For each surgical measure, you are asked to mark **ALL treated segments/vertebral bodies** (not just the uppermost and lowest segments as was done in the 2011 version with the variables “from” and “to”). **The extent of surgery must be completed for each different surgical measure separately.**

Example for decompression carried out at levels C4, C5, and C6:

**2011**

![Image 2011 Decompression]

**2017**

Mark all treated segments/vertebral bodies.

![Image 2017 Decompression]

Deformity correction
You can now specify surgical measures for deformity correction (Ponte/Smith-Petersen, pedicle subtraction osteotomy (PSO), vertebral column resection (VCR), or other) and the extent of surgery.

![Image Deformity Correction]

Other surgical measures
**Special Case:** If the only “Other surgical measure” marked is “wound drain”, then the “extent of surgery” fields should be left blank.

![Image Other Surgical Measures]

HOSPITAL STAY

Postop surgical complications before discharge
A new option has been added for “recurrent nerve paresis” as a post-operative surgical complication.

![Image Postop Surgical Complications]

*new