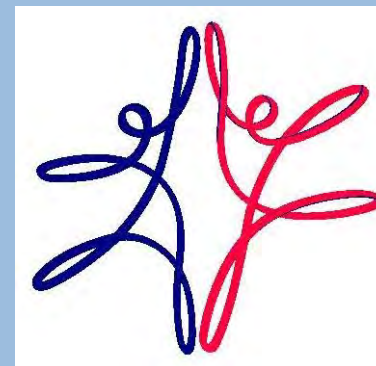


Spine Tango Register



Emin Aghayev
Institute for Social and Preventive Medicine
University of Bern

Inhaltsverzeichnis

- Was ist Spine Tango
- Entwicklung und Kennzahlen
- Warum braucht es ein Wirbelsäulenregister
- Welche Daten werden erhoben und wie
- Wofür wird die Datenbank benutzt
- Take home messages

Was ist Spine Tango

- internationales
- freiwilliges
- flexibles
- sich ständig weiterentwickelndes

Register mit dem Ziel der Generierung der Daten über die Wirbelsäulenerkrankungen und ihre Behandlungen sowie über die Therapieergebnisse.

<http://www.eurospine.org/spine-tango.htm>



The screenshot shows the website for Spine Tango, a project of Eurospine. The top navigation bar includes 'EURO SPINE', 'ABOUT US', 'ACTIVITIES', 'MEMBERS', 'PATIENTS', and a 'LOGIN' button. Below the navigation is a large photograph of a busy conference booth with several people seated at tables. A breadcrumb trail reads 'you are here / Activities / Spine Tango / Spine Tango Overview'. A search bar is located in the top right corner. The main content area features the 'Spine Tango Overview' heading and a large logo for 'SPINE TANGO' with 'EURO SPINE' written vertically to its right. On the right side, there is an 'AREA NAVIGATION' menu with the following items: 'ACTIVITIES', 'Meetings', 'Research', 'Education', 'Spine Tango', 'Spine Tango Overview', 'Forms', 'Modules', 'Literature', 'Demo Tour', 'Activities News', and 'Events Calendar'. At the bottom, a short paragraph describes the project's origin: 'Under the auspices of EUROSPINE and in cooperation with the Swiss RDL - medical Registries and Data Linkage (former IEFM) at the Institute for Social and Preventive Medicine of the University of Bern in Switzerland Spine Tango was installed in November 2002. Since then the system was enhanced in an evolution process based on the communication of physicians, the institute and'.

Was ist Spine Tango

Eurospine (Fachgesellschaft)

Uni Bern (die technische und methodologische Ausführung)

Spine Tango Komitee (Steuerung und Projektlead)

- Weiterentwicklung des Registers einschl. der Fragebögen
- Zusammenarbeit mit Industrie, etc.
- Guidelines für die Teilnahme, Publikationen, etc.
- Benutzermeeting jährlich

<http://www.eurospine.org/spine-tango.htm>

EURO SPINE ABOUT US ACTIVITIES MEMBERS PATIENTS LOGIN

you are here: Activities » Spine Tango » Spine Tango Overview

Spine Tango Overview

SPINE TANGO EURO SPINE

Under the auspices of EUROSPINE and in cooperation with the Swiss RDL - medical Registries and Data Linkage (former IEFM) at the Institute for Social and Preventive Medicine of the University of Bern in Switzerland Spine Tango was installed in November 2002. Since then the system was enhanced in an evolutionary process based on the communication of physicians, the Institute and

AREA NAVIGATION

- ACTIVITIES
 - Meetings
 - Research
 - Education
 - Spine Tango
 - Spine Tango Overview
 - Forms
 - Modules
 - Literature
 - Demo Tour
 - Activities News
 - Events Calendar

Entwicklung

2000 – Idee von Max Aebi (Bern) und Dieter Grob (Zurich)

2002 – 1. Version des Formulars

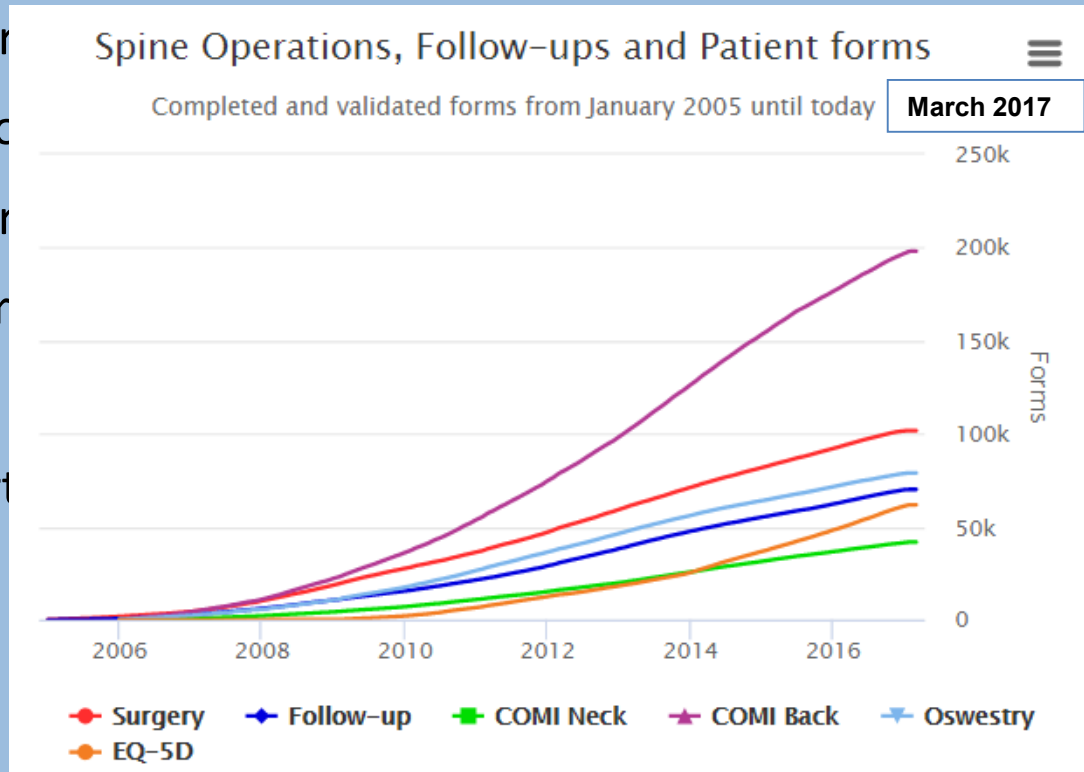
2004 – web-basierte Applikation

2005 – 2. Version des Formulars

2007 – erste Benchmarkingberichte

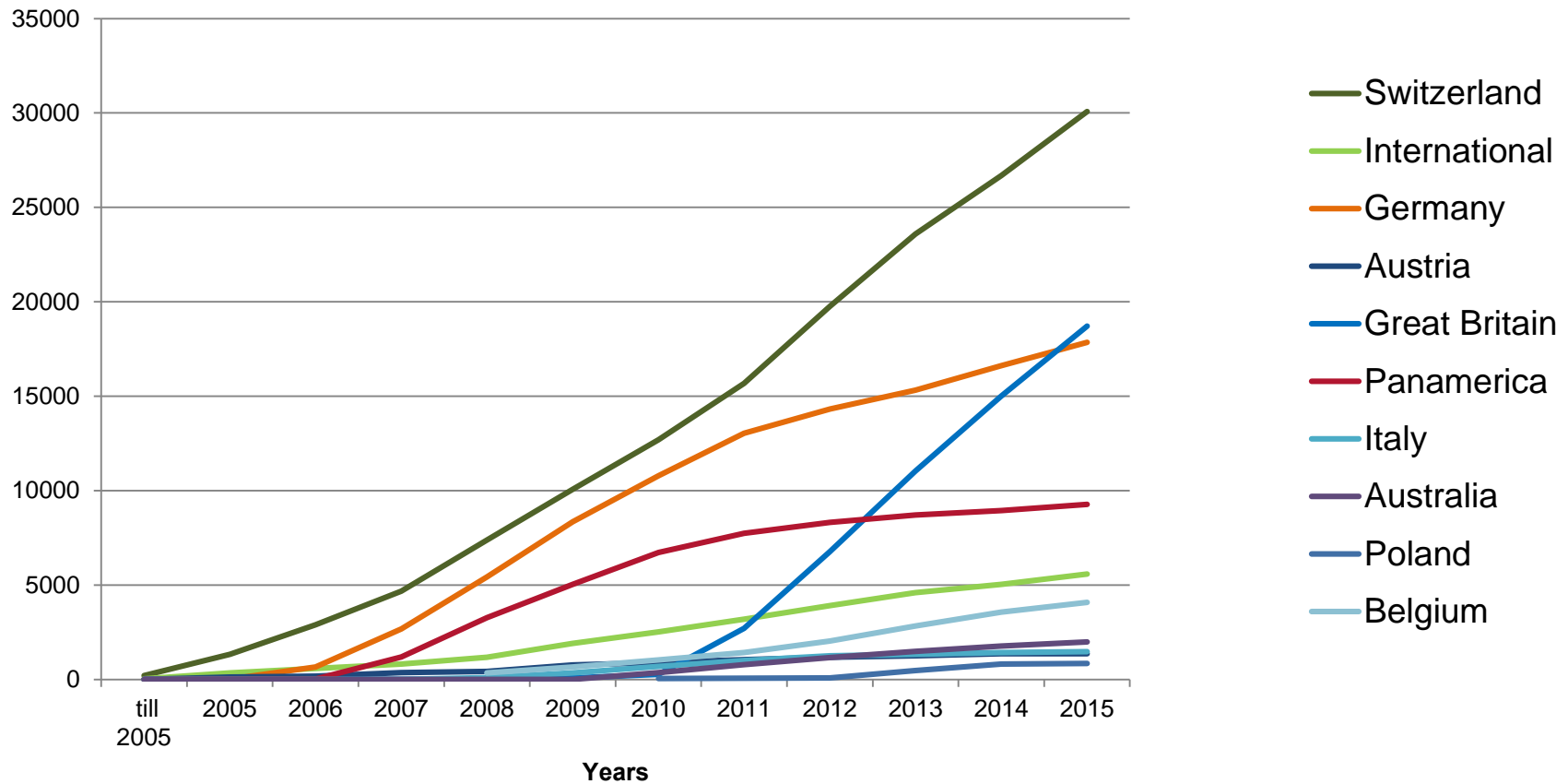
2011 – 2011-Version

2017 – 2017-Version, adoptiert



Entwicklung

Wachstumskurven verschiedener Spine Tango Module



Kennzahlen

Lanciert in:	2004
Daten:	
- Operationen	>100'000
- Nachuntersuchungen	ca. 85'000
- patienten-basiertes COMI	ca. 250'000
Kosten:	170'000 Eur / Jahr (Pauschale)
Sponsor:	EUROSPINE (Fachgesellschaft)
Länder:	17
Zentren:	ca. 65 (20 in der Schweiz)
Wissenschaftlicher Output:	>50 peer-reviewte Publikationen (1 outstanding full paper award)

Warum braucht es ein Wirbelsäulenregister

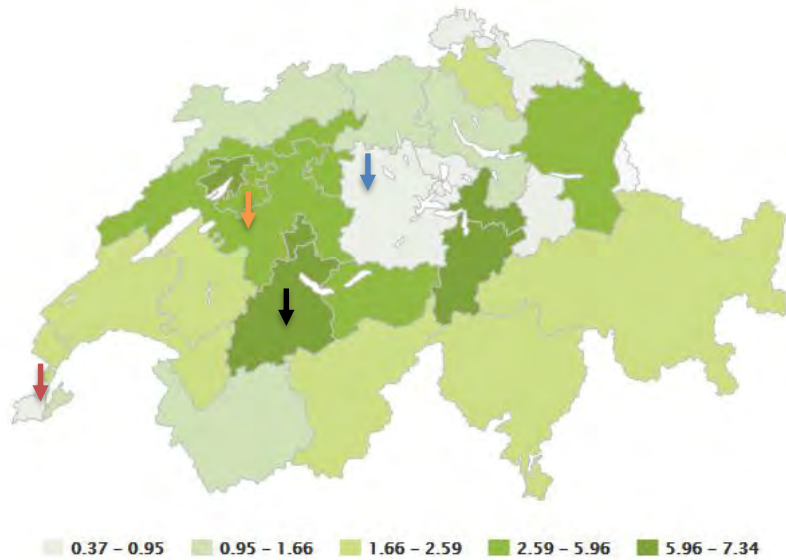
- Hohe Ansprüche, aber begrenzte Ressourcen
- Explosion der Gesundheitskosten
- rasante Entwicklungen in der MedTech Industrie
- mehrere Behandlungsoptionen
- heterogene Patientenpopulation
- alternde Gesellschaft
- fehlender Konsens
- Verweigerungen der Kostenerstattungen
- Präferenzen der Chirurgen
- Regionale Unterschiede

A large yellow bracket on the right side of the slide, grouping the list of challenges and pointing towards the word 'EVIDENZ'.

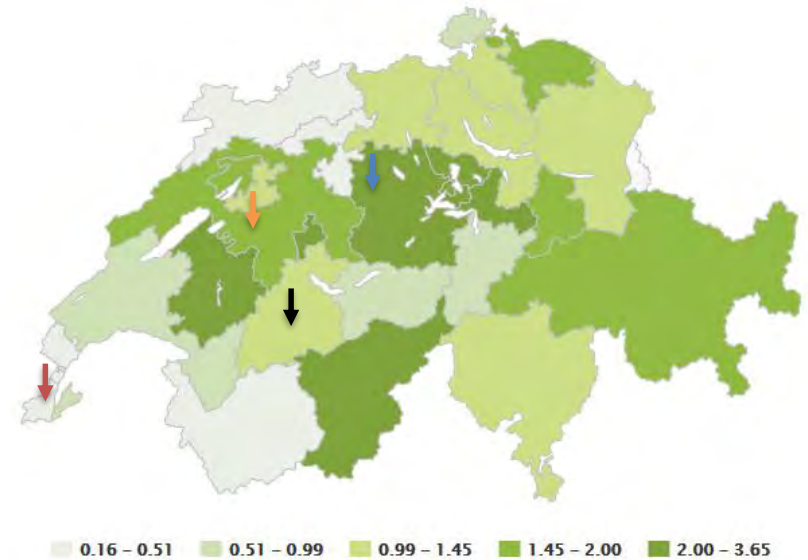
EVIDENZ

Swiss Health Atlas

Vertebroplastie 2013



Kyphoplastie 2013



Biblisch – jedoch aktuell?

Pater, dimitte illis: non enim sciunt quid faciunt.
Vater vergib ihnen denn sie wissen nicht was sie tun.



Crucifixión. Antonio Saura 1963

Welche Daten werden erhoben und wie

Arztbasierte Formulare

- Operation
- Nachuntersuchung
- Konservative Behandlung

Kerndaten

Patientenbasierte Formulare

- Core Outcome Index Measures (COMI)
 - Rücken-OP
 - Nacken-OP
 - Rücken-konservativ
 - Nacken-konservativ
- Oswestry
- EQ-5D
- NDI
- etc.

Papierformulare (scanbar)

Operation

SPINE TANGO SURGERY 2011

Checklist: Use a #2 pencil for marking. All answers must be entered on the web interface. All questions must be answered unless otherwise indicated.

Question type: answer allowed, multiple answer allowed, answer specify, level of intervention.

Level of intervention: no/never, seldom, sometimes, often, always.

Admission / Pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Main pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Surgical measures: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

SPINE TANGO SURGERY 2011

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Main pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Surgical measures: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

COMI

Spine Tango COMI Patient self-assessment

Checklist: Use a #2 pencil for marking. Only one answer per question allowed. Mandatory information.

Question type: answer allowed, multiple answer allowed, answer specify, level of intervention.

Level of intervention: no/never, seldom, sometimes, often, always.

Admission / Pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Main pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Surgical measures: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Spine Tango COMI Low Back Patient self-assessment

Checklist: Use a #2 pencil for marking. Only one answer per question allowed. Mandatory information.

Question type: answer allowed, multiple answer allowed, answer specify, level of intervention.

Level of intervention: no/never, seldom, sometimes, often, always.


Admission / Pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Main pathology: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Surgical measures: Specify grade of stenosis, Type of degeneration, Type of spondylolisthesis, Type of spondylolysis, Type of disc degeneration, Type of disc herniation, Type of disc protrusion, Type of disc extrusion, Type of disc sequestration, Type of disc sequestration.

Nachuntersuchung

Online Eingabe

A- A A+

superuser, module ▾

MEMcenter: department01, Bern Schweiz

Til Schweiger, 19.02.1956, Männlich,
Patientennummer : 222222 Zurück zum Patienten zurück zur Suchfunktion

SSE Spine Tango 2011: Operation (V1) Inkomplett

SSE Spine Tango Study (in cooperation with the Spine Society of Europe)

Aufnahme / Pathologie

- Operation
- Operative Massnahmen
- Hospitalisation

[+ Zusätzliche Subformulare](#)

Speichern Unvollständig speichern Zurücksetzen

ALLGEMEIN

1. Format

minimal
 komplett

2. Eintrittsdatum

tt.mm.jjj

3. Hauptdiagnose Andere Hauptdiagnose spezifizieren

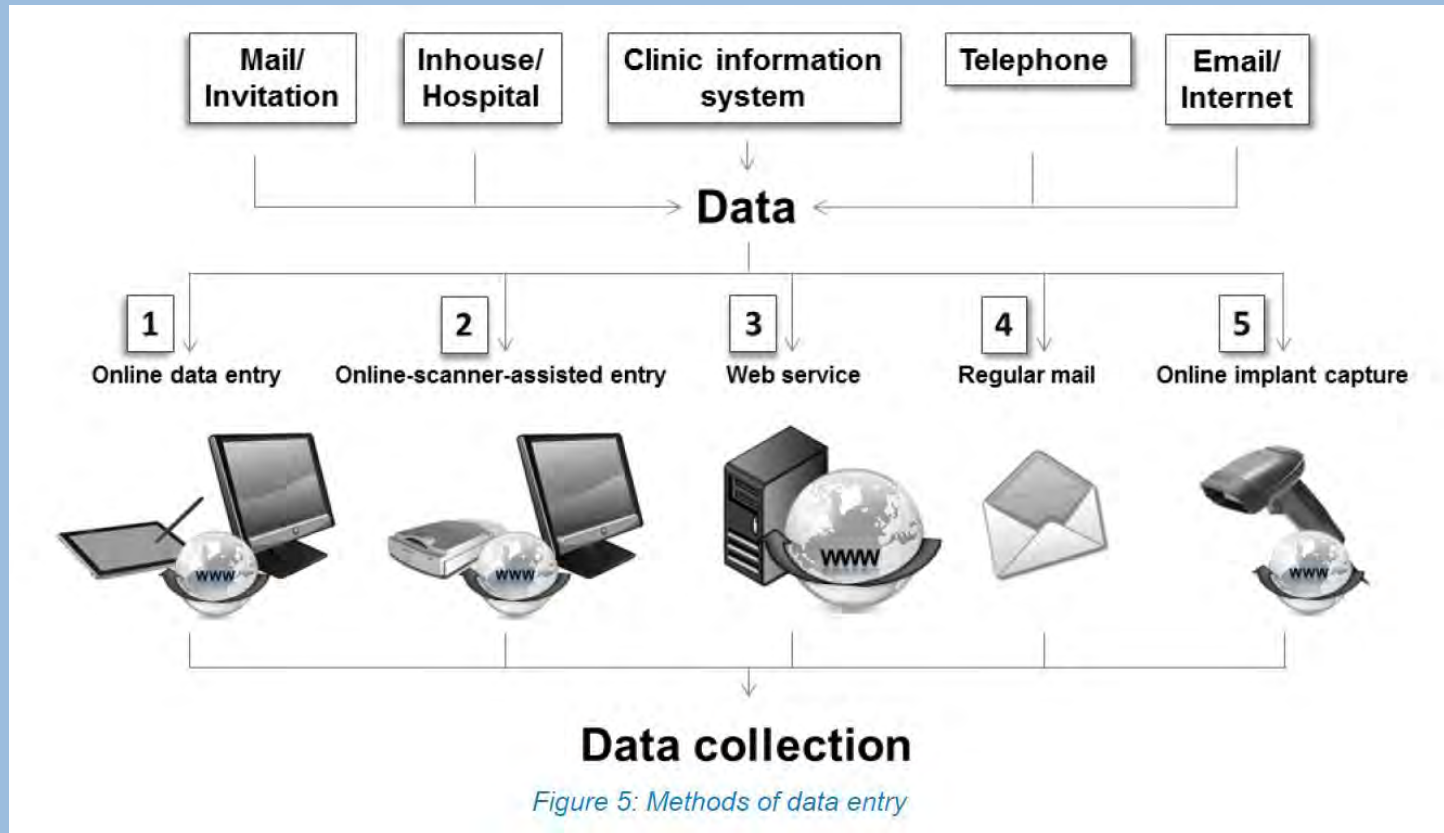
SPEZIFIKATION DER HAUPTDIAGNOSE

Degenerative Erkrankung

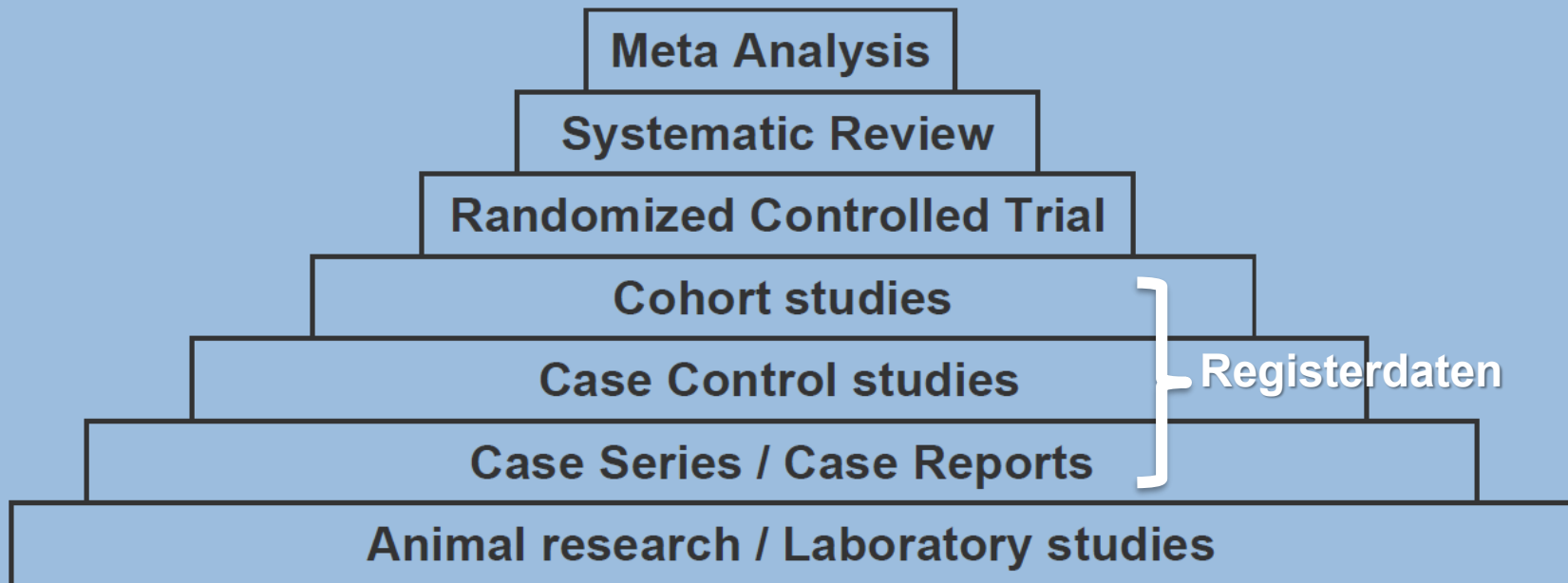
4. Typ der Degeneration Anders degenerative Erkrankung spezifizieren

BS-Hernie/Protrusion
 zentrale Stenose

Dokumentationswege



Evidenzlevel



Im Kontext der Health Technology Assessment

Wirksamkeit

Zweckmässigkeit

Wirtschaftlichkeit

Kontrollierte Studien	Beobachtungsstudien	Ökonomische Analysen
Wirksamkeit Sicherheit	Patient outcomes	Kosten und Outcomes
<u>Can it work?</u> Ideale klinische Bedingungen	<u>Does it work ?</u> Normale klinische Bedingungen	“Real life”

Wofür wird die Datenbank benutzt

>50 Publikationen

- breites Forschungsschwerpunkt: Versorgungs-
Ergebnisforschung, vergleichende Forschung
- Forschungsinfrastruktur
- Qualitätskontrolle intern und von extern

>100'000 Fälle aus 65 Spitälern
Benchmarkingberichte

The Walton Centre NHS Foundation Trust rated as Outstanding -another Outstanding Trust on Merseyside

England's Chief Inspector of Hospitals has found The Walton Centre NHS Foundation Trust to be Outstanding after an inspection by the Care Quality Commission. It is the second specialist hospital in the country to receive the highest rating – and the second on Merseyside.

There were many factors that contributed to the outstanding rating including:

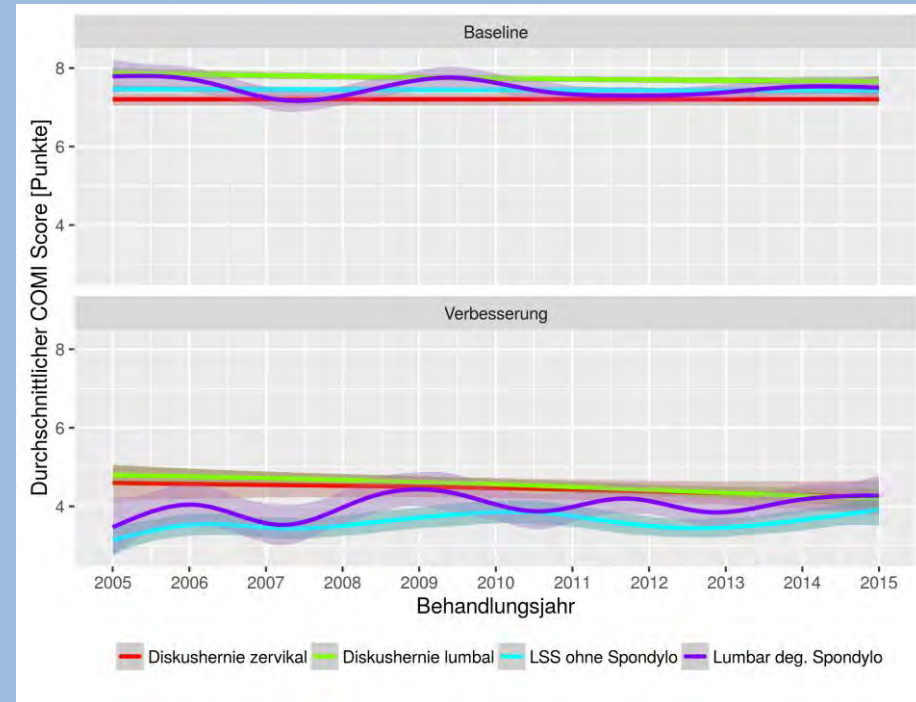
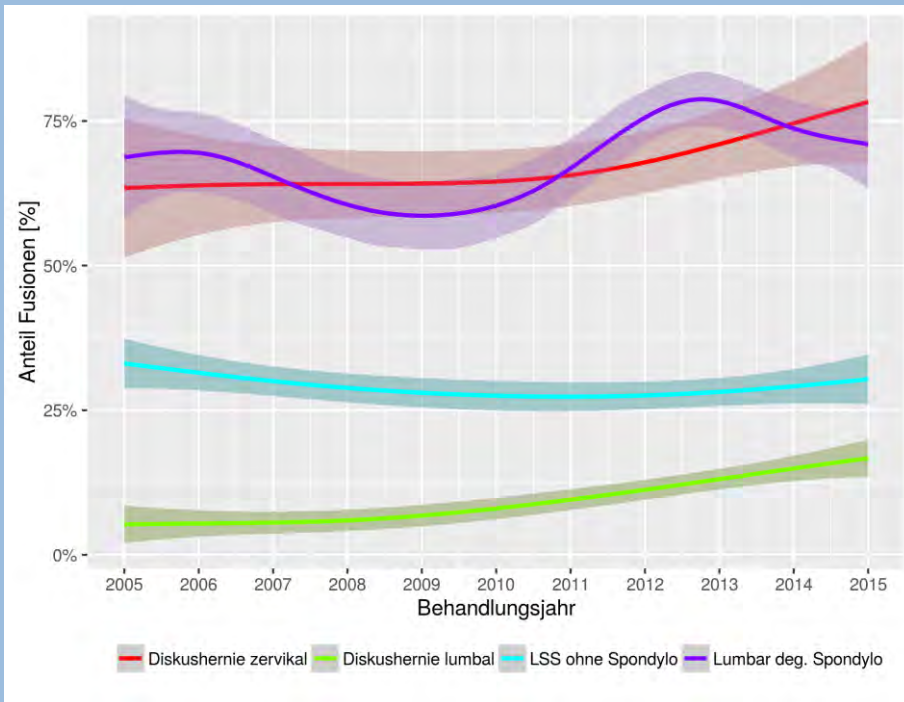
1

- The trust participated in the international Spine TANGO program which benchmarked their surgical outcomes against other services across Europe

EVIDENZ

- Hohe Fallzahl
- kontinuierliche
- Frühwarnsysteme
- Standardisierung
- Trendanalysen
- real-life Performance
- shared decision making (Patientenempowerung)

Trendanalysen



Register ergänzt die Evidenz aus den kontrollierten Studien



ELSEVIER



CrossMark

The Spine Journal 16 (2016) 136–145

**THE
SPINE
JOURNAL**

2015 Outstanding Paper Winner: Surgical Science

Total disc arthroplasty versus anterior cervical interbody fusion: use of the Spine Tango registry to supplement the evidence from randomized control trials

Lukas P. Staub, MD, PhD^a, Christoph Ryser, MD^a, Christoph Röder, MD^a,
Anne F. Mannion, PhD^b, Jeffrey G. Jarvik, MD^c, Max Aebi, MD^d, Emin Aghayev, MD^{a,*}

^aInstitute for Evaluative Research in Medicine, Stauffacherstrasse 78, 3014 Bern, Switzerland

^bSpine Centre Division, Department of Teaching, Research and Development, Schulthess Klinik, Lengghalde 2, CH-8008 Zurich, Switzerland

^cComparative Effectiveness, Cost and Outcome Research Centre, University of Washington, 4333 Brooklyn Ave NE, Seattle, WA 98104, USA

^dDepartment of Orthopaedic Surgery, Salem Spital, Schänzlistrasse 39, Bern 3025, Switzerland

Register ergänzt die Evidenz aus den kontrollierten Studien (Staub et al.)

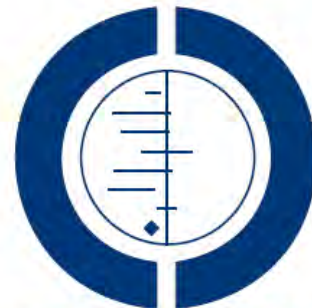
Degenerative Bandscheibenerkrankung:

Bandscheibenprothesen (BP) oder Fusion?

Coric	2011
Kelly	2011
Marzluff	2010
McAfee	2010
Pettine	2010
Heller	2009
Mummaneni	2007
Nabhan	2007
Porchet	2004

Arthroplasty versus fusion in single-level cervical degenerative disc disease (Review)

Boselie TFM, Willems PC, van Mameren H, de Bie R, Benzel EC, van Santbrink H



THE COCHRANE
COLLABORATION®



Register ergänzt die Evidenz aus den kontrollierten Studien (Staub et al.)

n=987

**1) Typische RCT-Patienten
n=739 (75.2%)**

Alter ≤60J
keine Spondylose
keine Degeneration der Faz.-G.
keine Spondylolisthese
kein trauma
keine Beteiligung von C7/Th1

**2) Atypische RCT-Patienten
n=248 (24.8%)**

Age >60 years
or spondylosis
or facet joint degeneration
or spondylolisthesis
or trauma
or C7/Th1

**3) Patienten mit längeren
Nachuntersuchungen
(>2 yrs) n=149 (15.1%)**

1:1 Matching BP:Fusion

multivariate Analyse BP:Fusion

multivariate analysis BP:Fusion

(on patient age, sex, segment, ASA status, duration of conservative therapy, deg. dic disease, disc herniation, baseline neck and arm pain and COMI score and follow-up interval)

Prognostisches Model: Schulthess Klinik)



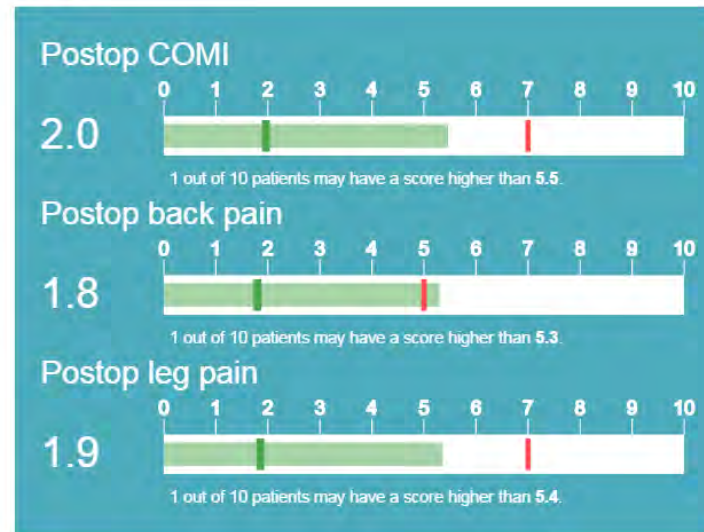
PrognosticTool: lumbar disc herniation

Input

Sex	male	
Age	56	(15-89)
Extent of lesion	>1 level	
Previous spine surgeries	0	
Surgeon experience	fellow (Oberarzt)	
Surgeon specialisation	orthop	
Main problem	leg pain	
Insurance	semi-private	
Morbidity state	ASA 1 (no disturbance)	
BMI	20-25	
Current smoker	no	
Preop COMI score	7	(0-10)
Preop back pain	5	(0-10)
Preop leg pain	7	(0-10)

Calculate

Output



Disclaimer

The authors do not guarantee the accuracy, reliability or currency of the information provided with this tool. Any errors in the information that are brought to our attention will be corrected as soon as possible. We reserve the right to change at any time without notice any information stored in the prognostic tool.

The authors accept no liability for any loss or damage a person suffers because that person has directly or indirectly relied on any information stored on this server.

Take home messages

Register als Studiendesign ist ein sehr wichtiges und zum Teil ein einzigartiges Tool für die Qualitätssicherung und Generierung der kollektiven Evidenz aus dem klinischen Alltag

Der Bedarf für eine kostengünstige, flexible und weit verbreitete Datenerhebung war in der Wirbelsäulentherapie niemals größer als heute. Die Interesse an der Datenerhebung wächst ständig und das zurecht so.

<http://www.eurospine.org/spine-tango.htm>