

Spine Registry-How to improve the quality of data?

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Why is it important?

- * Quality Control (Outcome, Complications)
- * Assessment of outcome of an operation
- * Meaningful research & Audit
- * Data used by industry for ODEP rating



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Completeness and accuracy of data in spine registries: an independent audit-based study

Bernhard Meyer¹, Ehab Shiban¹, Lucia E Albers¹, Sandro M Krieg²

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- * **Results:** Only 82.55% (95%-CI = [79.12-85.98]) of surgeries were documented, and on average 14.95% (95%-CI = [10.93-19.00]) of entries were not accurate with a wide variation (range; 6.21-27.44%) between centres.
 - * **Conclusion:** Due to the high inaccuracy, the high number of centres lacking mandatory entries at all and the number of false entries, these data alert us to advocate unannounced audits and further measures to improve the situation.



➤ [Eur Spine J.](#) 2022 Mar;31(3):801-811. doi: 10.1007/s00586-021-07093-8. Epub 2022 Jan 6.

Accuracy and agreement of national spine register data for 474 patients compared to corresponding electronic patient records

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- * **Methods:** We compared data in NOR spine registry against data in (EPR) for 474 patients operated for spinal stenosis in 2015 and 2016 at four public hospitals, using EPR as the gold standard. We assessed accuracy using the proportion correctly classified (PCC) and sensitivity.
 - * **Conclusion:** Compared to electronic patient records, NOR spine displayed weak agreement for perioperative complications, moderate agreement for ASA classification, strong agreement for perioperative details, and excellent agreement for height, weight, and smoking. NOR spine underreported perioperative complications and comorbidities when compared to EPRs. Patient-recorded data were more accurate and should be preferred when available.

Quality of data

- * Compliance/Completeness
- * Accuracy

Adequacy/Completeness of data

- * Compliance rate of clinical data input
- * Compliance of PROM data (Initial & subsequent—6 weeks/6 months/12 months)
- * Compliance rate of co-morbidities
- * Compliance rate of complications

Accuracy of data

- * PROM data
- * Intra & post operative complications
- * Re-do operation documentation

How to improve compliance

- * Input into registry
 - * Best Practice Tariff Introduced (data input increased from 30% to 80%)
- * Clinician data (clinical presentation & surgery)
 - * Need admin support
 - * Motivation to input complications
- * PROM
 - * Adequate information before hand & ample reminder
- * Implant data
 - Bar code scanning (mandatory regulation)
 - MDOR

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National spine surgery registries' characteristics and aims: globally accepted standards have yet to be met. Results of a scoping review and a complementary survey

[Simona Pascucci](#), [Francesco Langella](#), [Michela Franzò](#), [Marco Giovanni Tesse](#), [Enrico Ciminello](#), [Alessia Biondi](#), [Eugenio Carrani](#), [Letizia Sampaolo](#), [Gustavo Zanolì](#), [Pedro Berjano](#) & [Marina Torre](#) 

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* Conclusion--

Our study identified nine currently active national spine surgery registries. However, globally accepted standards for developing a national registry of spine surgery are yet to be established. Therefore, an international effort to increase result comparability across registries is highly advisable. We hope the recent initiative from the Orthopaedic Data Evaluation Panel (ODEP) to establish an international collaboration will meet these needs.

Conclusion

- * Huge scope to improve quality & quantity of data input
- * PROM data is very valuable
- * Implant data
- * High quality data is key for quality assessment



* Questions????