THERMAE
DI SALSOMAGGIORE

TREDICESIMO CONVEGNO DI TRAUMATOLOGIA CLINICA E FORENSE

20° Corso di Ortopedia, Traumatologia e Medicina Legale

LE LESIVITÀ IN ORTOPEDIA, COMPLESSITA' CLINICA IN PATOLOGIE ORTOPEDICHE E IN RIABILITAZIONE: DAL PLANNING PREOPERATORIO ALLA STABILIZZAZIONE. IL COMPLESSO RAPPORTO FRA RISARCIMENTO E INDENNIZZO. LEGGE GELLI-BIANCO: RESPONSABILITÀ VECCHIE E NUOVE NELL'ACCERTAMENTO DELLA COLPA MEDICA

Presidenti

F.M. Donelli, M. Gabbrielli, G. Varacca

24-25 Novembre 2023

Palazzo dei Congressi - Salsomaggiore Terme (PR)

SIOT

EBM: complicanze ed errori, quali differenze da identificare in Chirurgia Ortopedica

Gustavo Zanoli

Roberto Biscione

Alessandro Gildone

Massimiliano Manfredini

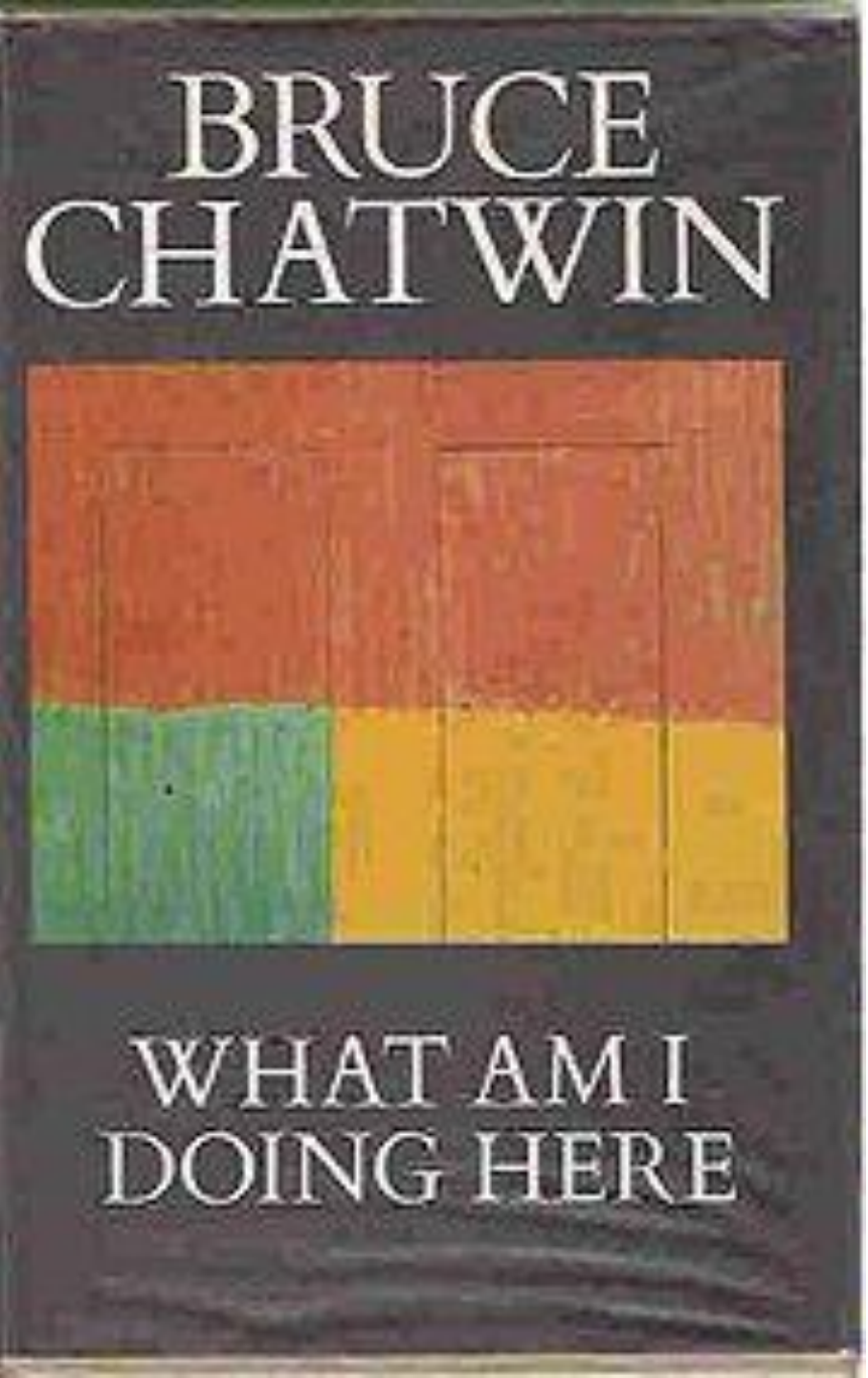
Giovanni Corvelli

Fabio Santamaria

Giuseppe De Rito

CASA DI CURA S. MARIA MADDALENA

G.L.O.B.E.



Gustavo Zanoli: Disclosure

Private general orthopaedic surgeon

- Patients approx. 40%
- NHS approx.40%
- Insurances approx.20%

Teaching (0,5%)

Funding from companies

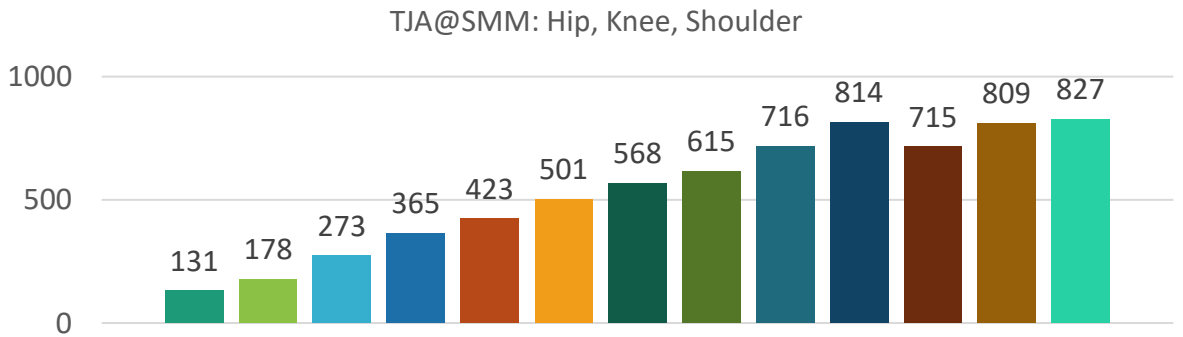
- Advisory board, lectures
  - Ethicon, Gruenenthal, Angelini
- (invitations, travel expenses)
  - Johnsson & Johnsson, Stryker, Zimmer-Biomet, etc. …

Voluntary research activity

- (Cochrane work is actually at my own costs…)

No FUNDING for this presentation

Dr. G. De Rito, MD



CASA DI CURA S. MARIA MADDALENA

G.L.O.B.E.

EBM, complicanze ed errori in chirurgia ortopedica e traumatologia

- Definizioni
- Tipologie di errori
- Misurazione/epidemiologia degli errori e delle complicanze
- Strategie di Prevenzione: valutazione dei risultati

THERMAE DI SALSOMAGGIORE

DODICESIMO CONVEGNO DI TRAUMATOLOGIA CLINICA E FORENSE

19° Corso di Ortopedia, Traumatologia e Medicina Legale

LE CAUSE DI INSUCCESSO IN ORTOPEDIA

E.B.M. identificazione dell'errore - ***G. Zanoli***

THERMAE DI SALSOMAGGIORE

DECIMO CONVEGNO DI TRAUMATOLOGIA CLINICA E FORENSE

17° Corso di Ortopedia, Traumatologia e Medicina Legale

LE COMPLICANZE
IN ORTOPEDIA E TRAUMATOLOGIA

09.00 Evidence Based Surgery - ***G. Zanoli***

CASA DI CURA S. MARIA MADDALENA

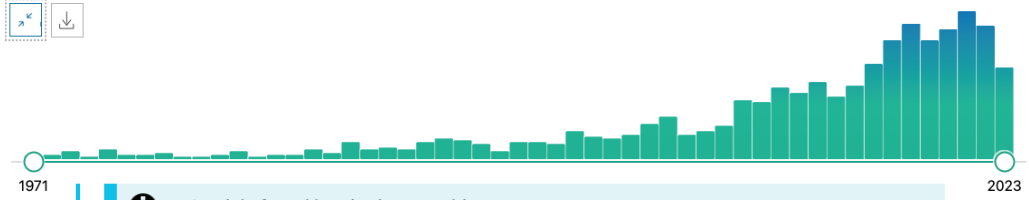
G.L.O.B.E.

Complications and Errors in Orthopaedic Surgery

RESULTS BY YEAR

896 results

Page 1 of 90



1 article found by citation matching

Technical errors and complications in orthopaedic trauma surgery.
Meeuwis MA, et al. Arch Orthop Trauma Surg. 2016. PMID: 26690070 Free PMC article.

1 Cite Share
Causal influence of muscle weakness on cardiometabolic diseases and osteoporosis.
Mou X, He B, Zhang M, Zhu Y, Ou Y, Chen X.
Sci Rep. 2023 Nov 15;13(1):19974. doi: 10.1038/s41598-023-46837-y.
PMID: 37968290 Free PMC article.
Genetic predisposition to muscle weakness led to increased risk of coronary artery disease (inverse variance weighted [IVW] analysis, beta-estimate: 0.095, 95% confidence interval [CI]: 0.023 to 0.166, standard **error** [SE]:0.036, P-value = 0.009) and reduced risk of heart f ...

2 Cite Share
Complications Have Not Improved With Newer Generation Robots.
Farivar D, Kim TT, Sy CA, Baron EM, Nomoto EK, Walker CT, Skaggs DL.
Global Spine J. 2023 Nov 15:21925682231216081. doi: 10.1177/21925682231216081. Online ahead of print.
PMID: 37965963
Half of these **complications** (3/6) were due to a reference frame **error**. In total, four patients (1.5%) required reoperation to fix 10 misplaced screws. CONCLUSION: Despite newer generation robots, robot related **complications** are not decreasing. As half the rob ...

3 Cite Share
A random forest algorithm-based prediction model for moderate to severe acute postoperative pain after orthopedic surgery under general anesthesia.
Shi G, Liu G, Gao Q, Zhang S, Wang Q, Wu L, He P, Yu Q.
BMC Anesthesiol. 2023 Nov 6;23(1):361. doi: 10.1186/s12871-023-02328-1.
PMID: 37932714 Free PMC article.


SIOT 2023

SABATO 11 NOVEMBRE

Sala Caravaggio

16:30 - 17:30

GLOBE - INTELLIGENZA ARTIFICIALE: AL FIANCO O AL POSTO DELL'ORTOPEDICO?

Moderatori: P. Tranquilli Leali *(Roma)*, M. Venosa *(Roma)*

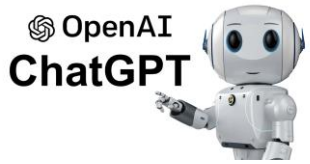
16:30 CHATGPT È PIÙ BRILLANTE DI ME. I NUOVI TEMPI DELLA PRODUZIONE SCIENTIFICA
J. Ramazzotti* *(Milano)*, G. Tucci *(Roma)*

16:37 GOOGLE HEALTH SA MOLTE PIÙ COSE DI ME. LA DIAGNOSI AI TEMPI DEL MACHINE LEARNING
A. Rizzo* *(Brescia)*, E. Romanini *(Roma)*

16:44 L'IA FA IL MEDICO MEGLIO DI ME? ETICA, CONOSCENZA E SANITÀ
A. Mastrogregori* *(Roma)*, R. Padua *(Roma)*

16:51 STIAMO SPRECANDO IL TALENTO DELL'IA? COSA VORREI CHE L'IA FACESSE PER ME
R.M. Panzera* *(Roma)*, P. Berjano Coquillat *(Monza)*

16:58 DISCUSSIONE
Discussori: G. Zanoli *(Ferrara)*, M. Mazzoleni *(L'Aquila)*



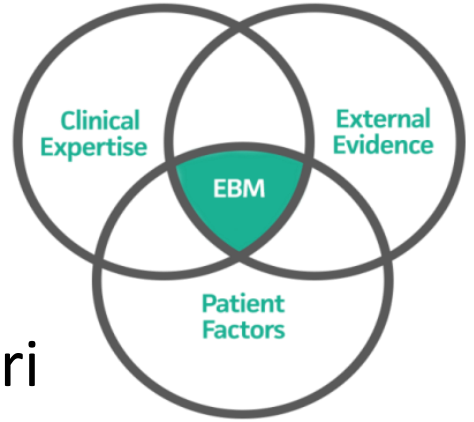
Article

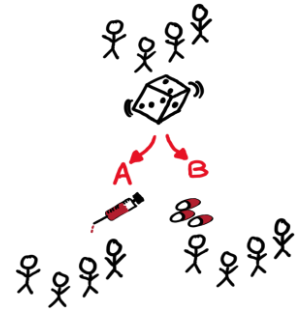
Impact of System and Diagnostic Errors on Medical Litigation Outcomes: Machine Learning-Based Prediction Models

Norio Yamamoto [1,2,3,*,†], Shintaro Sukegawa [4,†] and Takashi Watari [5,6,7]

G.L.O.B.E.

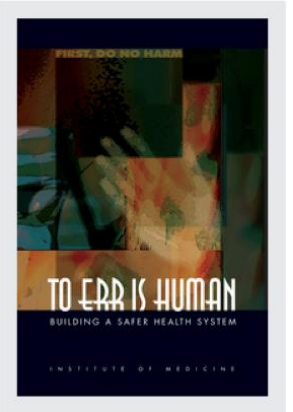
Effetti avversi…





- …possono essere il risultato di complicazioni ed errori
- Non tutti gli errori conducono a una complicanza
- Le complicanze non sono solo causate da errori, ma possono essere dovute alla patologia (o al trattamento) in sé

- Complicanze:
  - Note, previste o prevedibili…
  - A volte prevenibili, mai del tutto eliminabili
- Errori
  - Idealmente da ridurre a 0
  - Ma… *Errare humanum est*



Definizioni…

Arch Orthop Trauma Surg (2016) 136:185–193
DOI 10.1007/s00402-015-2377-5

ORTHOPAEDIC SURGERY

Technical errors and complications in orthopaedic trauma surgery

M. A. Meeuwis[1] · M. A. C. de Jongh[2] · J. A. Roukema[1] · F. H. W. M. van der Heijden[1] · M. H. J. Verhofstad[3]

- A medical error is defined as an act of omission or commission in planning or execution that contributes or could contribute to an unintended result.
- A complication was defined according to the Association of Surgeons of the Netherlands as a condition or event, unfavourable to the patient's health, causing irreversible damage or requiring a change in therapeutic policy

…Risultati

Arch Orthop Trauma Surg (2016) 136:185–193
DOI 10.1007/s00402-015-2377-5

ORTHOPAEDIC SURGERY

Technical errors and complications in orthopaedic trauma surgery

M. A. Meeuwis[1] · M. A. C. de Jongh[2] · J. A. Roukema[1] · F. H. W. M. van der Heijden[1] · M. H. J. Verhofstad[3]

- In 78 (1.8 %) of all 4310 osteosynthesis procedures an **error** in osteosynthesis was registered. The number of procedures in which an error was registered was significantly lower when an orthopaedic trauma surgeon was present (OR = 0.53; p = 0.007) .
- One or more postoperative **complications** were registered in 745 of all 3758 operated patients (19.8 %). This was excluding errors in osteosynthesis. There was no significant difference in the number of postoperative complications after procedures in which an orthopaedic trauma surgeon was present or absent (16.7 vs. 19.1 %; OR = 0.85; p = 0.088). The age of patients was significantly higher (55 vs. 45 years; p < 0.001) in the group of procedures followed by a complication. In addition, these procedures followed by a complication had a longer duration of 18 min (p < 0.001) and were more often performed in an emergency setting (p = 0.001).

Errori di esecuzione:

13% degli errori in chirurgia ortopedica (Wong 2009)

- Negligenza, imperizia, imprudenza…
- Curva di apprendimento
- Stanchezza/stress

Possibili risposte:

- Insegnamento, esercitazione, addestramento
- Adeguamento turni e personale
- Navigazione, CAOS, Robotica…

Background Information, Expert Opinion, Non-EBM Guidelines

JB&JS REVIEWS

Arthroscopic Simulation: The Future of Surgical Training

A Systematic Review

Systematic Reviews

Saad Lakhani, MBChB, MSc(Distinction)

Omar A. Selim, MBBCh

Muhammad Zahid Saeed, MBBS, FRCS(Tr&Orth), FEBOT(Tr&Orth)

Investigation performed at the Royal Free Hospital in affiliation with University College London Medical School, London, United Kingdom

Abstract

Background: Arthroscopic simulation has rapidly evolved recently with the introduction of higher-fidelity simulation models, such as virtual reality simulators, which provide trainees an environment to practice skills without causing undue harm to patients. Simulation training also offers a uniform approach to learn surgical skills with immediate feedback. The aim of this article is to review the recent research investigating the use of arthroscopy simulators in training and the teaching of surgical skills.

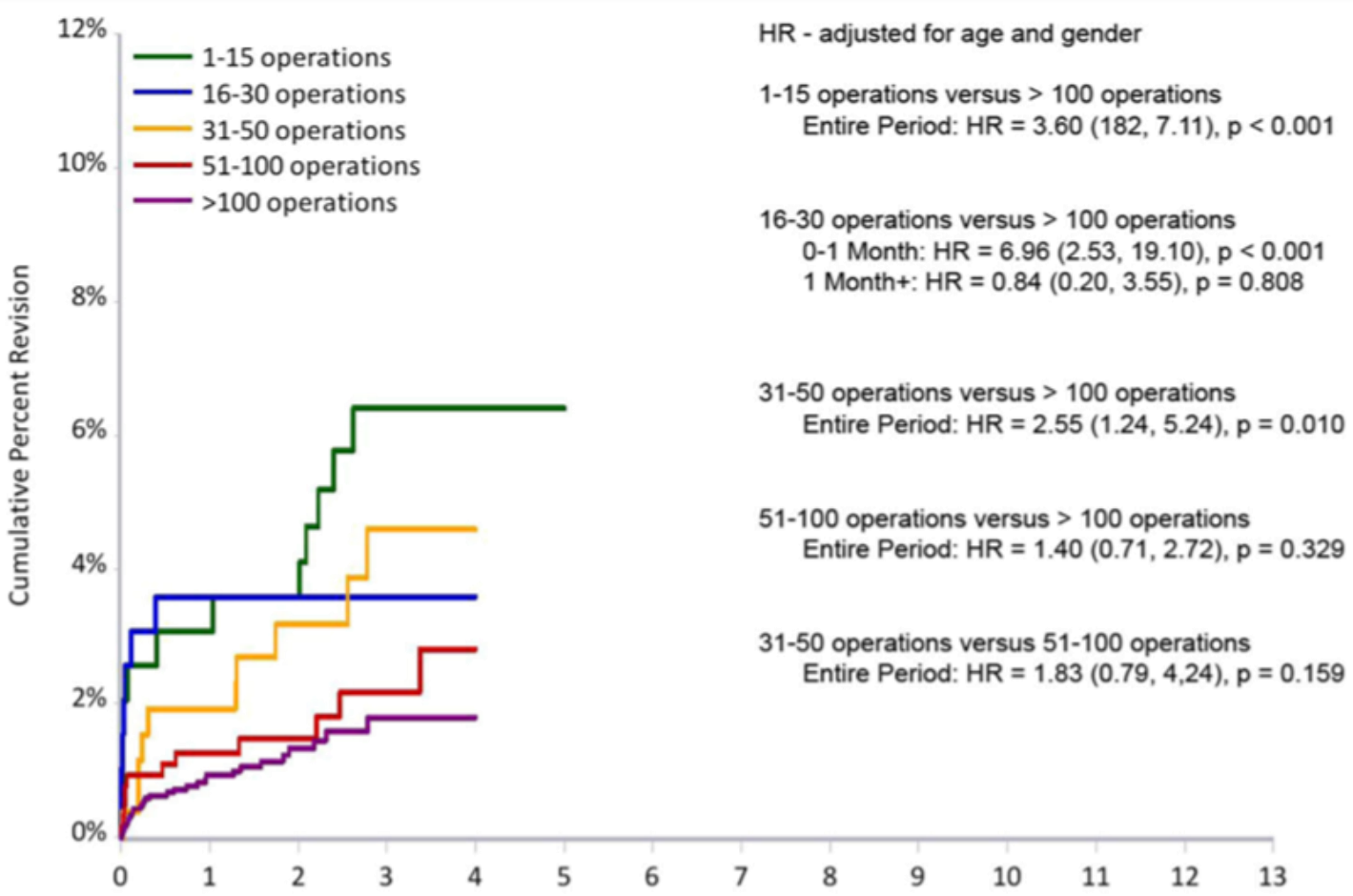
Methods: A systematic review of the Embase, MEDLINE, and Cochrane Library databases for English-language articles published before December 2019 was conducted. The search terms included arthroscopy or arthroscopic in combination with simulation or simulator.

Results: We identified a total of 44 relevant studies involving benchtop or virtually simulated ankle, knee, shoulder, and hip arthroscopy environments. The majority of these studies demonstrated construct and transfer validity; considerably fewer studies demonstrated content and face validity.

Conclusions: Our review indicates that there is a considerable evidence base regarding the use of arthroscopy simulators for training purposes. Further work should focus on the development of a more uniform simulator training course that can be compared with current intraoperative training in large-scale trials with long-term follow-up at tertiary centers.

G.L.O.B.E.

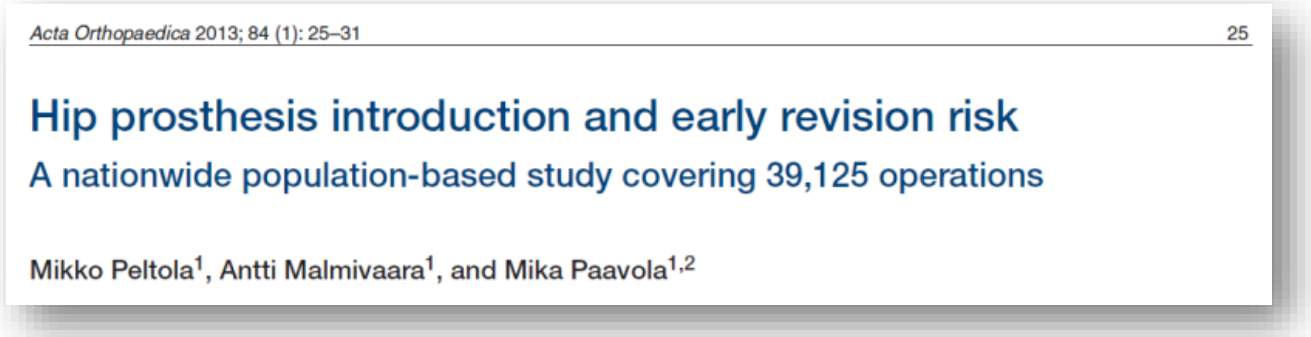
Learning curve 1



For surgeons who have performed >100 procedures, revision rate reduced **from 6% for the first 15 procedures to 2% after first 100**.

de Steiger CORR 2015

Learning curve 2



Acta Orthopaedica 2013; 84 (1): 25–31 25

Hip prosthesis introduction and early revision risk

A nationwide population-based study covering 39,125 operations

Mikko Peltola[1], Antti Malmivaara[1], and Mika Paavola[1,2]

The **first 15 operations** with a new stem or cup model had an increased risk of early revision surgery.

The **risk of early revision** at the implementation phase should be considered when a new type of THA is brought into use.

Peltola Acta Orthop 2013

Learning curve 3

CLINICAL ORTHOPAEDICS AND RELATED RESEARCH
Number 290, pp. 87–95

Operative Treatment in 120 Displaced Intraarticular Calcaneal Fractures

Results Using a Prognostic Computed Tomography Scan Classification

ROY SANDERS, M.D., PAUL FORTIN, M.D., THOMAS DIPASQUALE, D.O., AND ARTHUR WALLING, M.D.

When results were compared by year, a distinct learning curve appeared (Tables 3 and 4). The worst results occurred at the start of the series, whereas the number of excellent–good results improved each successive year (1987, 24%; 1988, 54%; 1989, 73%; 1990, 84%). When these data were further analyzed with respect to fracture type and year, it appeared that Type II articular fractures were easier to fix than Type III articular fractures. With time, even Type III results improved. Despite a better outcome for Type II and III articular fractures over time, however, the results of operative intervention in Type IV articular fractures were not improved on even after four years.

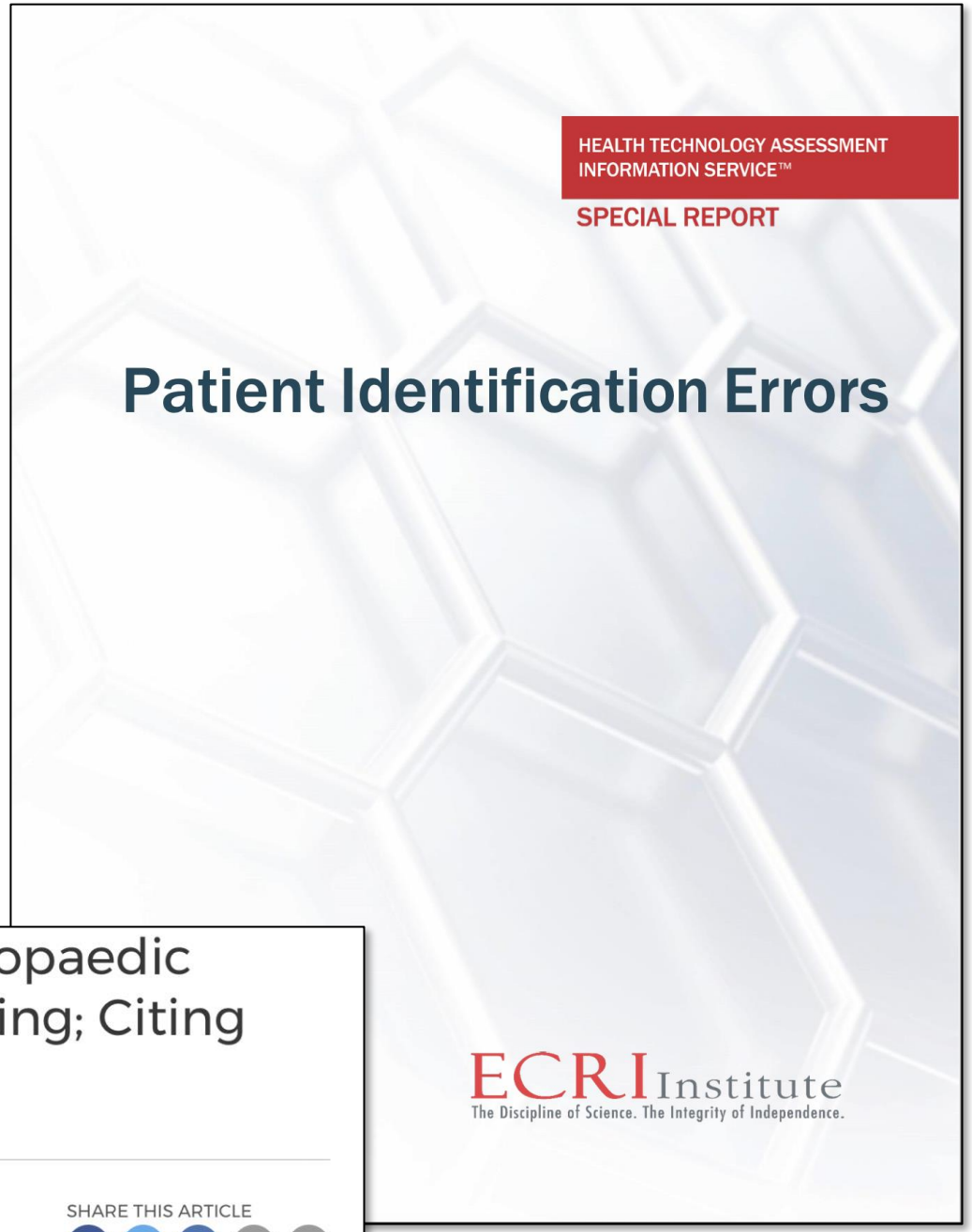
Sanders et al., CORR 1993

Errori di identificazione

paziente, lato, sito ecc.

Systematic Reviews

- 106 lavori
  - 39 prevalenza, 44 cause, 40 interventi
- Lavori su Prevalenza:
  - Registrazione
  - Braccialetto
  - Cartella errata e ordini medicinali
  - Amministrazione
  - Chirurgia
  - Radiologia
  - Laboratorio
  - Trasfusioni



Patient Safety is No Accident: Orthopaedic Surgery Error Data May Be Misleading; Citing National Figures

NEWS PROVIDED BY
American Academy of Orthopaedic Surgeons →
Oct 26, 2010, 07:00 ET

SHARE THIS ARTICLE

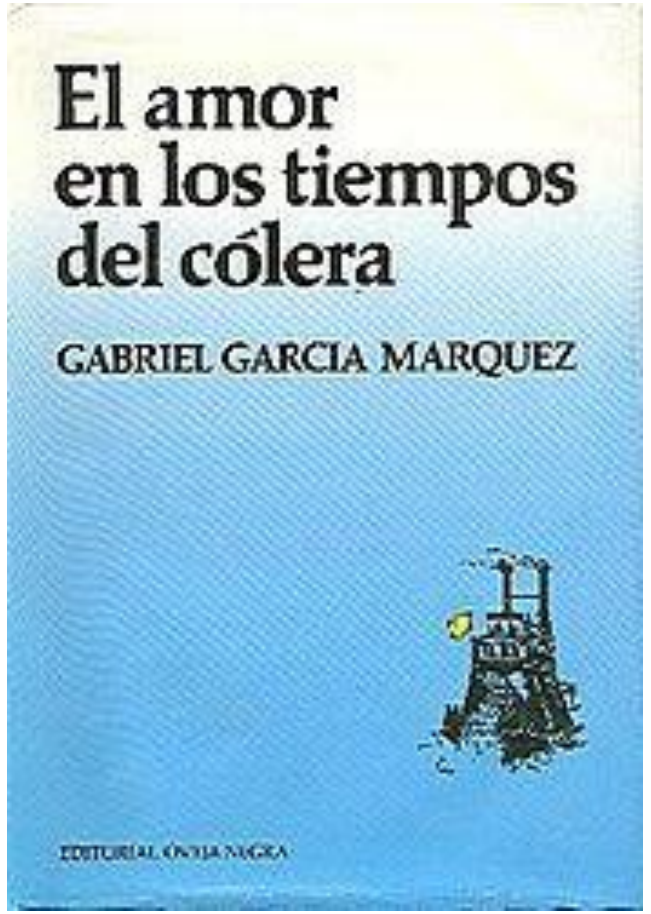
G.L.O.B.E.

Errori di indicazione

- Subdoli
- Buonafede o malafede?
- Chi può valutarli? In quale contesto?
- Ruolo dei produttori

La Medicina ai tempi del DRG

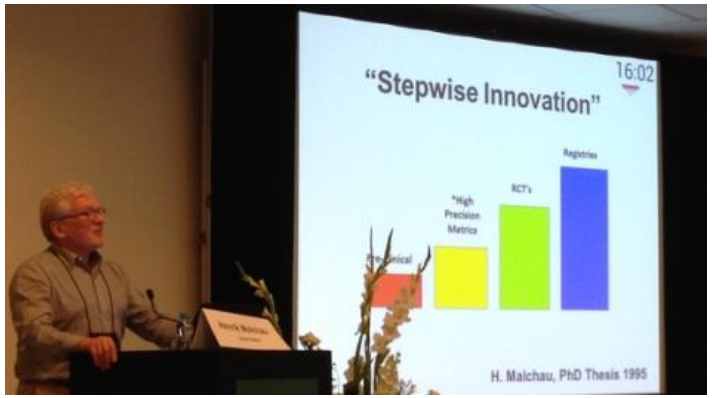
- Personaggi:
  - Pazienti
  - Medici
  - “Aziende”
    - Università
    - Ospedali
    - Privati
  - Istituzioni di controllo
    - Agenzie
    - ISS
  - Governo
    - Locale
    - Nazionale
  - Aziende
    - Farmaci
    - Impianti
    - Congressi



Regole del gioco

- Ufficiale: Appropriatezza
  - Fare bene le cose giuste alle persone giuste nel momento giusto nel luogo giusto
- Non scritta: DRG = prodotto
  - Produrre più DRG possibile, operare il più possibile

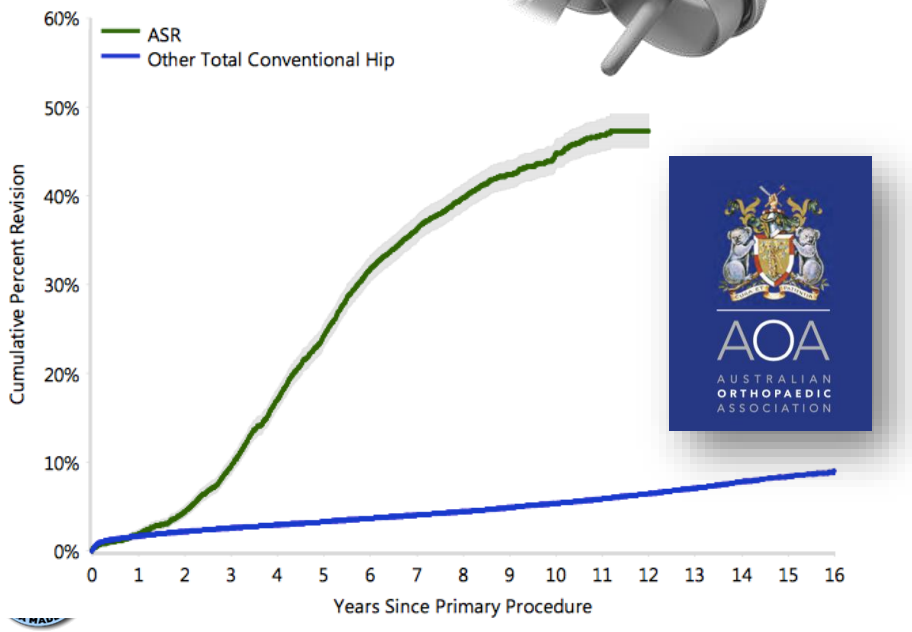
Stepwise innovation or Failed innovation?



Lack of evidence—the anti-stepwise introduction of metal-on-metal hip replacements

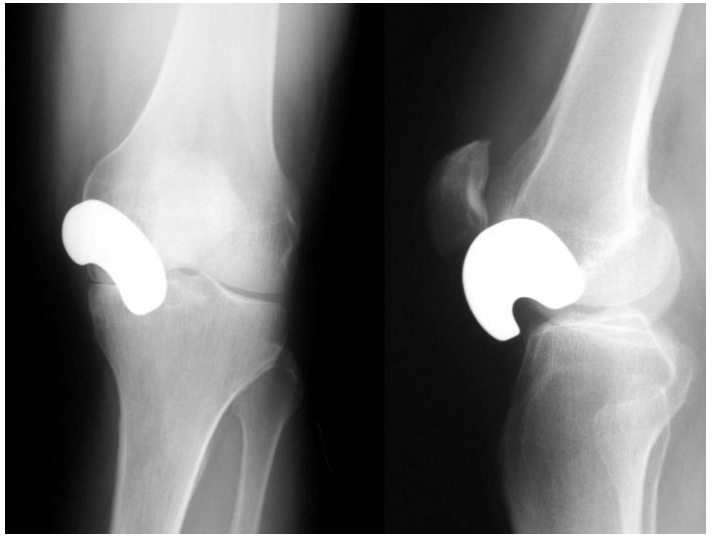
A systematic review and a comparative assessment of the literature and registry data

Aleksi REITO [1], Lari LEHTOVIRTA [1,2], Olli LAINIALA [1], Keijo MÄKELÄ [3], and Antti ESKELINEN [1]



2003

2013



G.L.O.B.E.

Responsabilità dei produttori

Cureus
Open Access Original Article
DOI: 10.7759/cureus.29861

The Impact of Sterile Instrument Set Wrapping Defects on Trauma and Orthopaedic Surgery Theatre Lists

Fitzgerald Anazor [1], Vusumuzi Sibanda [1], Kalsoom Altaf [1], Lisa Downer [2], Jai Relwani [1]

1. Trauma and Orthopaedics, William Harvey Hospital, Ashford, GBR 2. Decontamination Contract Support Officer, Kent and Canterbury Hospital, Canterbury, GBR

Corresponding author: Fitzgerald Anazor, fitzgerald.anazor@nhs.net

Patient Safety in Surgery
BioMed Central

Editorial

Open Access

Errors in handling and manufacturing of orthopaedic implants: the tip of the iceberg of an unrecognized system problem?

Johannes K Fakler*, Yohan Robinson, Christoph E Heyde and Thilo John

47 pazienti consecutivi, protesi da cementare impiantata come non cementata

THE JOURNAL OF ARTHROPLASTY
The Journal of Arthroplasty
AAHKS AMERICAN ASSOCIATION OF HIP AND KNEE SURGEONS
Submit

MISCELLANEOUS | VOLUME 35, ISSUE 8, P2259-2266, AUGUST 01, 2020

Medical Device Recalls in Orthopedics: Recent Trends and Areas for Improvement

Sravya P. Vajapey, MD, MBA • Mengnai Li, MD, PhD

Published: March 21, 2020 • DOI: https://doi.org/10.1016/j.arth.2020.03.025 • Check for updates

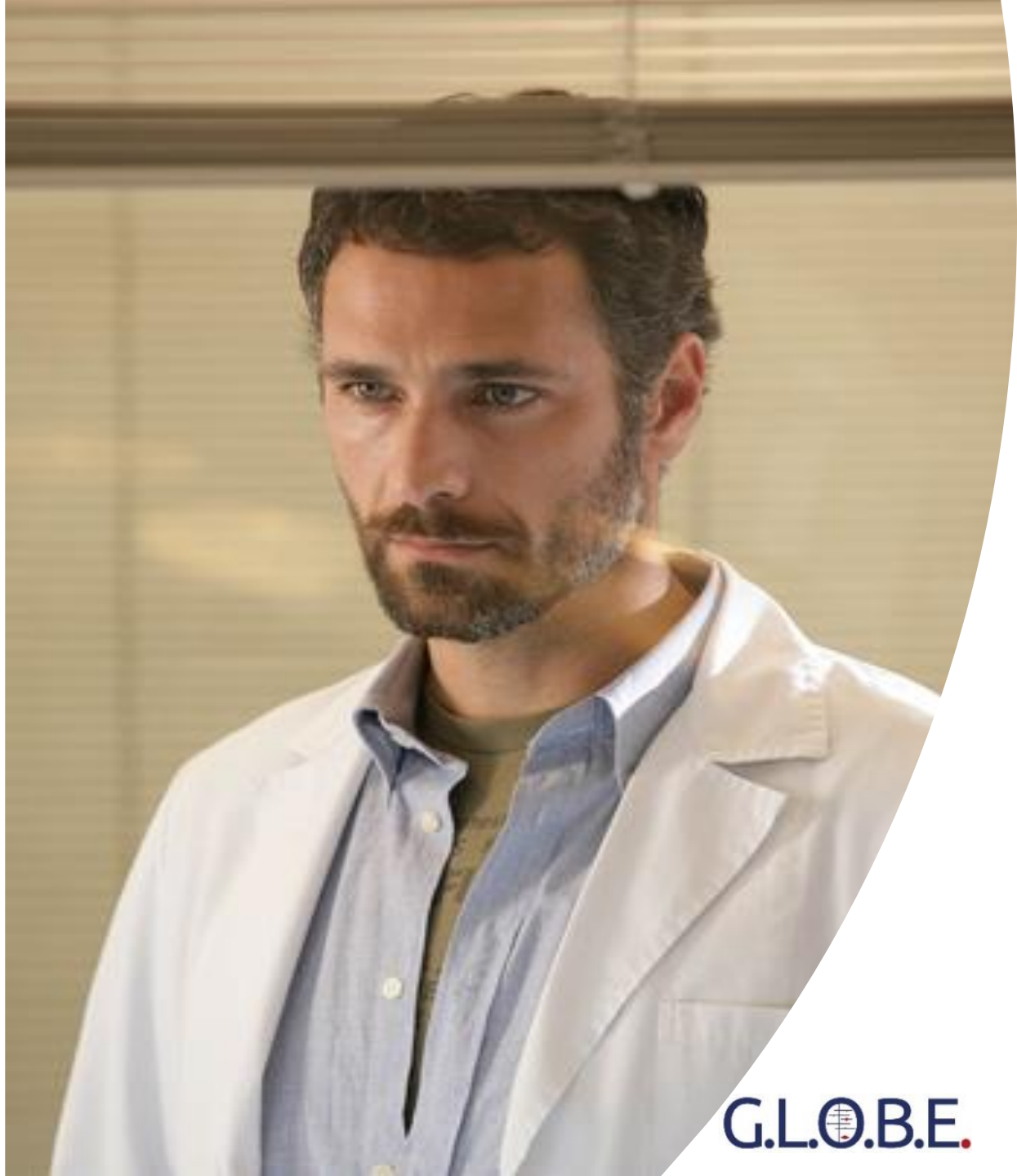
Orthopedic device recalls remain a significant concern and constitute, on average, 16.6% of all class II medical device recalls from 2015 to 2019. Packaging errors were the most common reasons for orthopedic device recalls, followed by design flaws and manufacturing issues

CASA DI CURA S. MARIA MADDALENA

G.L.O.B.E.

Errori di comunicazione

- Mancata comunicazione fra professionisti:
  - 24,7% degli errori in ortopedia (Wong 2009)
  - 48,6% degli errori di lato (Stahel 2010)
  - 100% degli errori di persona (Stahel 2010)
- Mancata comunicazione con pazienti (anche sulle complicanze):
  - Errori di comunicazione medico-paziente
  - Errori causati da comunicazione medico-paziente



Ortopedici…incerti?

Clin Orthop Relat Res (2015) 473:3564–3572
DOI 10.1007/s11999-015-4304-z

Clinical Orthopaedics and Related Research®
A Publication of The Association of Bone and Joint Surgeons®

CrossMark

SYMPOSIUM: PSYCHOSOCIAL ASPECTS OF MUSCULOSKELETAL ILLNESS

Do Surgeons Treat Their Patients Like They Would Treat Themselves?

Clin Orthop Relat Res (2016) 474:1360–1369
DOI 10.1007/s11999-015-4623-0

Clinical Orthopaedics and Related Research®
A Publication of The Association of Bone and Joint Surgeons®

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CLINICAL RESEARCH

Do Orthopaedic Surgeons Acknowledge Uncertainty?

Teun Teunis MD, Stein Janssen MD, Thierry G. Guitton MD, PhD, David Ring MD, PhD, Robert Parisien MD

Incertezza

Dobbiamo abituarci a convivere con l'incertezza, l'imprevisto, il mistero non perché non abbiamo scoperto le regole di funzionamento della natura ma perchè abbiamo scoperto che l'incertezza è insita nelle sue regole.

Antonio Bonaldi

Available online at www.sciencedirect.com

ScienceDirect

Health Professions Education 4 (2018) 67–69

www.elsevier.com/locate/hpe

The Art of Acknowledging that We Know Nearly Nothing

Jimmie Leppink

Comunicare (l'incertezza), sulle Complicanze

Available online at www.sciencedirect.com

ScienceDirect

Health Professions Education 4 (2018) 97–106

www.elsevier.com/locate/hpe

Communication Skills in Patient-Doctor Interactions: Learning from Patient Complaints

Janine W.Y. Kee[a,*], Hwee Sing Khoo[b], Issac Lim[b], Mervyn Y.H. Koh[c]

Four main themes of communication errors were identified, namely: non-verbal (eye contact, facial expression and paralanguage), verbal (active listening and inappropriate choice of words), and content (poor quantity and quality of information provided); and poor attitudes (lack of respect and empathy)

The only effective and ultimately the only correct recommendation is to openly address the complication of PJI. The patient should be informed of the possibility of an infection as soon as possible and undergo appropriate diagnostic tests. This can only be done through an open and honest dialogue with the patient. Complaints are unnecessary and irrelevant, due to hygiene standards observed in most operating rooms around the world. As a rule, PJIs should be considered a random event. Responsibilities can be attributed to the surgeon or to the attending physician only in the case of delays or a wait-and-see approach to diagnostic out- comes and subsequent treatment. In a nutshell, the best thing is to be honest.

Parvizi and Gehrke cit in Basile 2021

Royal College of Surgeons
ADVANCING SURGICAL CARE

REVIEW

Ann R Coll Surg Engl 2017; **99:** 185–188
doi 10.1308/rcsann.2016.0364

Recognising and dealing with complications in orthopaedic surgery

D Ricketts[1], BA Rogers[1], T Roper[2], X Ge[3]

[1]Brighton and Sussex University Hospitals NHS Trust, UK
[2]Brighton and Sussex NHS Library and Knowledge Service, UK
[3]People's Hospital of Rizhao, China

ABSTRACT

Orthopaedic surgeons need information about the complications they are likely to encounter. The literature on complications is difficult to interpret owing to a lack of agreed definitions, problems with collecting accurate data and with data interpretation. We suggest a role for the Royal College of Surgeons and specialist societies in collecting and interpreting complications data.

KEYWORDS

Orthopaedic – Complications

Consenso informato

4. Fattori di rischio

Alcune patologie, terapie farmacologiche in corso e altre condizioni soggettive possono causare un aumento delle condizioni di rischio per questo tipo di intervento (vedere anche il punto successivo "Possibili complicanze"). Tra i più comuni fattori di rischio ci sono:

- Età avanzata
- Obesità
- Malnutrizione
- Fumo
- Abuso di alcool o sostanze stupefacenti
- Pregressi interventi
- Presenza di impianti precedenti
- Osteoporosi
- Diabete
- Patologie cardiovascolari
- Patologie reumatologiche o autoimmuni
- Patologie neurologiche
- Patologie respiratorie
- Patologie cutanee

Questa lista non è esaustiva, e nel caso lei sospetti di avere una condizione che aumenta il suo rischio operatorio ne discuta con il chirurgo e l'anestesista. Alcune di queste condizioni sono modificabili e andrebbero corrette per quanto possibile prima dell'intervento, è possibile che in alcuni casi per questo motivo il suo intervengo venga posposto o sospeso. In questi casi le verranno fornite informazioni da condividere anche con il suo medico curante.

5. Possibili complicanze dell'intervento

Durante e dopo l'intervento si possono manifestare le seguenti complicanze, riportate in letteratura con una frequenza complessiva compresa tra 0,1% (ovvero un caso su mille) e il 3,0% (tre casi su cento) degli interventi, a seconda delle casistiche.

Nello specifico le principali possibili complicanze sono le seguenti (tra parentesi le percentuali di frequenza note):

- lesioni vascolari/emorragie, ematomi, trombosi venose-embolie polmonari; lesioni neurologiche periferiche con paralisi o paresi, danni cerebrali (2-3%);
- infezioni acute, subacute, tardive (1%); diabete, obesità, ipertensione e altre patologie e/o condizioni espongono a un rischio maggiore per questa complicanza;
- usura delle componenti protesiche; rottura della protesi stessa (1%);
- lussazioni articolari (<1%);
- fratture intra e post-operatorie (<1%);
- complicanze cardiache, polmonari e/o sistemiche o evoluzione di precedenti patologie con possibilità anche di esito letale (0,4%);
- anemia postchirurgica
- deiscenza ferita chirurgica; cicatrici inestetiche e/o dolorose; cheloidi;
- necrosi cutanea, in particolare in presenza di pregresse cicatrici chirurgiche
- insufficiente articolarità;
- allungamento o accorciamento dell'arto;
- mobilizzazione asettica della protesi;
- inidoneo posizionamento delle componenti protesiche;
- presenza di rumori articolari durante la mobilizzazione e/o la deambulazione;
- dolore persistente;
- zoppia;
- calcificazioni periarticolari e ossificazioni eterotopiche;
- allergie/sensibilizzazioni a componenti metalliche precedentemente ignote al paziente;
- altre complicanze statisticamente meno frequenti;
- complicanze conseguenti alle procedure anestesiologiche di cui discuterà con l'anestesista.

In caso di intervento di revisione tali complicanze possono aumentare in percentuale considerevole.

Misure di errore e complicanze

J Gen Intern Med. 2003

Measuring Errors and Adverse Events in Health Care

Eric J. Thomas, MD, MPH, Laura A. Petersen, MD, MPH

- Morbidity and Mortality Conferences and Autopsy
- Malpractice Claims Analysis
- Error Reporting Systems
- Administrative Data Analysis
- Chart Review
- Electronic Medical Record Review
- Observation of Patient Care
- Clinical Surveillance

In this paper, we identify 8 methods used to measure errors and adverse events in health care and discuss their strengths and weaknesses. We focus on the reliability and validity of each, as well as the ability to detect latent errors (or system errors) versus active errors and adverse events. We propose a general framework to help health care providers, researchers, and administrators choose the most appropriate methods to meet their patient safety measurement goals.

KEY WORDS: **medical error; adverse events; patient safety; measurement.**
J GEN INTERN MED 2003;18:61–67.

G.L.O.B.E.

Misurazione/epidemiologia delle complicanze e degli errori. Numeri attendibili?

- Surveys di chirurghi
- Analisi retrospettiva di database locali/nazionali
- Studi osservazionali

J Bone Joint Surg Am. 2009 Mar 1;91(3):547-57. doi: 10.2106/JBJS.G.01439.

Medical errors in orthopaedics. Results of an AAOS member survey

David A Wong [1], James H Herndon, S Terry Canale, Robert L Brooks, Thomas R Hunt, Howard R Epps, Steven S Fountain, Stephen A Albanese, Norman A Johanson

Affiliations + expand

J Formos Med Assoc. 2007 Mar;106(3):212-6. doi: 10.1016/S0929-6646(09)60242-4.

Patient safety in Taiwan: a survey on orthopedic surgeons

Cheng-Ta Yang [1], Hsin-Hsin Chen, Sheng-Mou Hou

Affiliations + expand

PMID: 17389165 DOI: 10.1016/S0929-6646(09)60242-4

Free article

Review

J Bone Joint Surg Br. 2009 Oct;91(10):1274-80. doi: 10.1302/0301-620X.91B10.22644.

Wrong-site surgery in orthopaedics

P M Robinson [1], L T Muir

Affiliations + expand

PMID: 19794159 DOI: 10.1302/0301-620X.91B10.22644

Observational Study

Int J Risk Saf Med. 2022;33(3):319-332. doi: 10.3233/JRS-210051.

Never events in orthopaedics: A nationwide data analysis and guidance on preventative measures

Ahmed T Hafez [1], Islam Omar [2], Balaji Purushothaman [3], Yusuf Michla [3], Kamal Mahawar [4 5]

Affiliations + expand

PMID: 34486990 DOI: 10.3233/JRS-210051

Esempio di Classificazione in base al danno

- **Nessuno**, no harm (near miss)
- **Minore**, low harm (minimal harm—patient(s) required extra observation or minor treatment)
- **Moderato**, moderate harm (short-term harm—patient(s) required further treatment, or procedure)
- **Grave**, severe harm (permanent or long-term harm)
- **Morte**, death

Panesar *et al. BMC Musculoskeletal Disorders* 2012, **13**:93
http://www.biomedcentral.com/1471-2474/13/93

BMC Musculoskeletal Disorders

RESEARCH ARTICLE Open Access

Mortality as an indicator of patient safety in orthopaedics: lessons from qualitative analysis of a database of medical errors

Sukhmeet S Panesar[1,2,3*], Andrew Carson-Stevens[4], Bhupinder S Mann[5], Mohit Bhandari[6] and Rajan Madhok[7]

A total of 257 incident reports were analysed. Four main thematic categories emerged. These were: (1) stages of the surgical journey – 118/191 (62%) of deaths occurred in the post-operative phase; (2) causes of patient deaths – 32% were related to severe infections; (3) reported quality of medical interventions – 65% of patients experienced minimal or delayed treatment; (4) skills of healthcare professionals – 44% of deaths had a failure in non-technical skills

G.L.O.B.E.

Ann Surg. 2009 Aug;250(2):187-96. doi: 10.1097/SLA.0b013e3181b13ca2.

The Clavien-Dindo classification of surgical complications: five-year experience.

Clavien PA[1], Barkun J, de Oliveira ML, Vauthey JN, Dindo D, Schulick RD, de Santibañes E, Pekolj J, Slankamenac K, Bassi C, Graf R, Vonlanthen R, Padbury R, Cameron JL, Makuuchi M.

Clin Orthop Relat Res (2012) 470:2220–2226
DOI 10.1007/s11999-012-2343-2

Clinical Orthopaedics and Related Research®
A Publication of The Association of Bone and Joint Surgeons®

CLINICAL RESEARCH

Reliability of a Complication Classification System for Orthopaedic Surgery

Ernest L. Sink MD, Michael Leunig MD, Ira Zaltz MD, Jennifer Claire Gilbert MS, John Clohisy MD, Academic Network for Conservational Hip Outcomes Research Group

Clin Orthop Relat Res (2015) 473:1574–1581
DOI 10.1007/s11999-014-3597-7

Clinical Orthopaedics and Related Research®
A Publication of The Association of Bone and Joint Surgeons®

SYMPOSIUM: PATIENT SAFETY: COLLABORATION, COMMUNICATION, AND PHYSICIAN LEADERSHIP

Use of the National Surgical Quality Improvement Program in Orthopaedic Surgery

Cesar S. Molina MD, Rachel V. Thakore BS, Alexandra Blumer BS, William T. Obremskey MD, MPH, MMHC, Manish K. Sethi MD

G.L.O.B.E.

Misurare l'errore in ortopedia

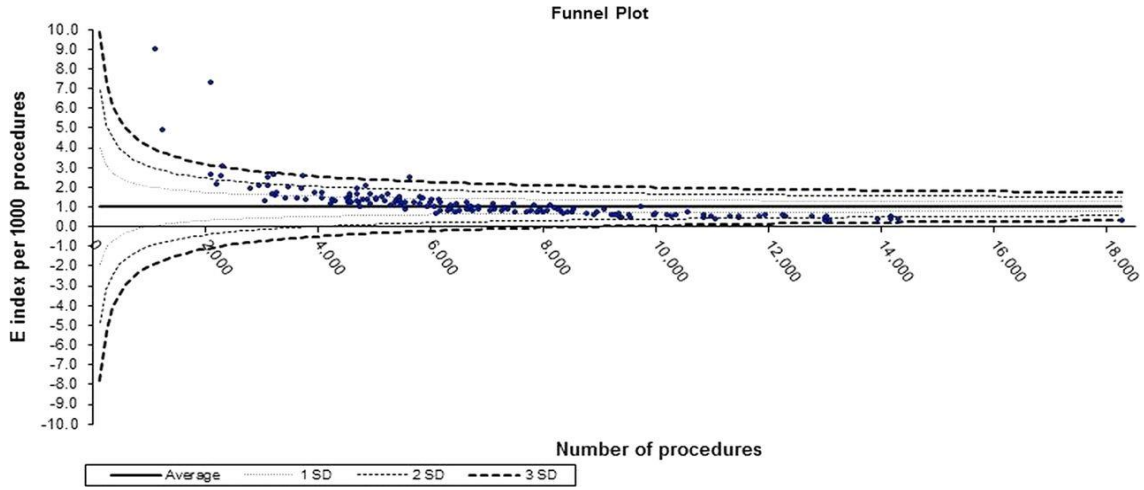
Open Access Research

BMJ Open

The orthopaedic error index: development and application of a novel national indicator for assessing the relative safety of hospital care using a cross-sectional approach

Sukhmeet S Panesar,[1,2] Gopalakrishnan Netuveli,[3] Andrew Carson-Stevens,[4] Sundas Javad,[5] Bhavesh Patel,[6] Gareth Parry,[7,8] Liam J Donaldson,[9] Aziz Sheikh[2]

Orthopaedic Error Index for all hospitals in England.



- Orthopaedic error index:

$$E = 0.5P + 0.5S$$

- Frequenza percentuale (P = propensity)
- Danno provocato (S = Severity)
- Da 0 a 100

Among the 155 hospitals, 5 lay outside the prespecified control limits. These were hospitals that had relatively small numbers of procedures, but high OEI values. Of note, there is an almost linear association with larger hospitals having fewer errors.

Journal of Orthopaedic Science
Available online 7 December 2021
In Press, Corrected Proof

Original Article

The impact of system and diagnostic errors for medical litigation outcomes in orthopedic surgery

Norio Yamamoto [a, b], Takashi Watari [c, d], Ayako Shibata [e], Tomoyuki Noda [f], Toshifumi Ozaki [g]

All of the claims in which the orthopedic surgeon lost were associated with a diagnostic or system error, with the most common one being system error.

Archives of Orthopaedic and Trauma Surgery (2022) 142:3659–3665
https://doi.org/10.1007/s00402-021-03958-1

ORTHOPAEDIC SURGERY

Litigations in orthopedics and trauma surgery: reasons, dynamics, and profiles

Martin Gathen[1] · M. Jaenisch[1] · F. Fuchs[1] · L. Weinhold[2] · M. Schmid[2] · S. Koob[1] · D. C. Wirtz[1] · M. D. Wimmer[1]

Our results could not confirm the often-stated trend of having more litigations against orthopedic and trauma surgeons. Although the absolute numbers increased, the number of litigations per 1000 patients treated declined. Patients who underwent elective surgery were more likely to file complaints than emergency patients.

Strategie di Prevenzione: valutazione dei risultati

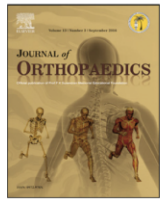
- Osservazionali
- Valutazioni a posteriori
- Before and after
- Confronto di coorti
- RCT?

Journal of Orthopaedics 16 (2019) 86–90

Contents lists available at ScienceDirect

Journal of Orthopaedics

journal homepage: www.elsevier.com/locate/jor



Review article: Current literature on surgical checklists and handoff tools and application for orthopaedic surgery

Bilal Sleiman[a], Zain Sayeed[d,e], Muhammad T. Padela[a,c,d,e,*], Abdurrahman F. Padela[a], Vamsy Bobba[e], Walid Yassir[a,e,f], Todd Frush[e], Khaled J. Saleh[a,b,c,**]

J Orthop Surg Res. 2011 Apr 18;6:18. doi: 10.1186/1749-799X-6-18.

Can the surgical checklist reduce the risk of wrong site surgery in orthopaedics?--Can the checklist help? Supporting evidence from analysis of a national patient incident reporting system

Sukhmeet S Panesar [1], Douglas J Noble, Saqeb B Mirza, Bhavesh Patel, Bhupinder Mann, Mark Emerton, Kevin Cleary, Aziz Sheikh, Mohit Bhandari

Observational Study > Int J Risk Saf Med. 2022;33(3):319-332. doi: 10.3233/JRS-210051.

Never events in orthopaedics: A nationwide data analysis and guidance on preventative measures

Ahmed T Hafez [1], Islam Omar [2], Balaji Purushothaman [3], Yusuf Michla [3], Kamal Mahawar [4 5]

Affiliations + expand

PMID: 34486990 DOI: 10.3233/JRS-210051

> Healthc (Amst). 2016 Dec;4(4):307-311. doi: 10.1016/j.hjdsi.2016.01.005. Epub 2016 Mar 8.

Efficacy of surgical safety checklist: Assessing orthopaedic surgical implant readiness

Benjamin G Thomasson [1], David Fuller [2], John Mansour [3], Robert Marburger [4], Erin Pukenas [5]

Affiliations + expand

PMID: 28007224 DOI: 10.1016/j.hjdsi.2016.01.005

Effetto Hawthorne
(Effetto dello sperimentatore)

- Anni ’20-30. Sperimentazioni negli stabilimenti di Hawthorne (Chicago)della Western Electric.

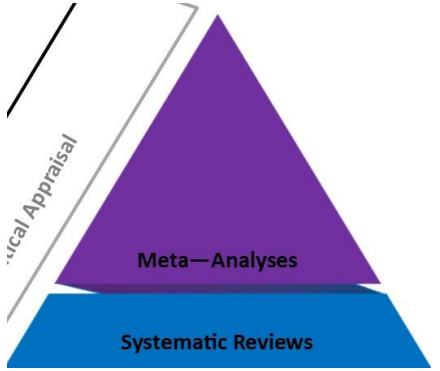
- 1^ fase: verificare cali di produttività dovuti al peggioramento delle condizioni ambientali.
- Risultati opposti alle aspettative.

- **Definizione**: L’atto di osservazione/supervisione può influenzare il comportamento dei soggetti della ricerca e confondere gli effetti di altre variabili indipendenti.

RESEARCH ARTICLE

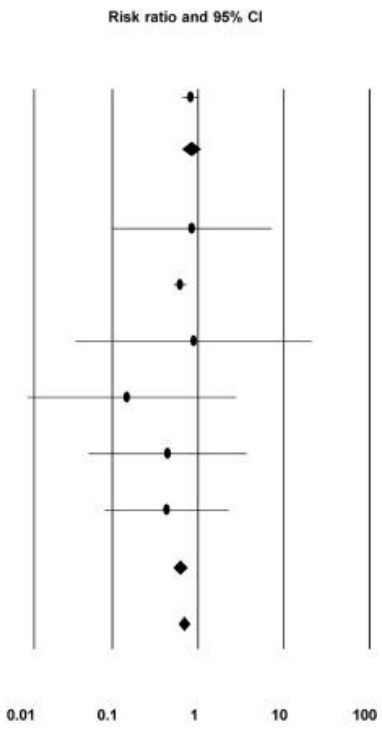
Change in Adverse Events After Enrollment in the National Surgical Quality Improvement Program: A Systematic Review and Meta-Analysis

Joshua Montroy[1], Rodney H. Breau[1,3,4]*, Sonya Cnossen[1], Kelsey Witiuk[1], Andrew Binette[2], Taylor Ferrier[2], Luke T. Lavallée[4], Dean A. Fergusson[1,3], David Schramm[1,3,5]



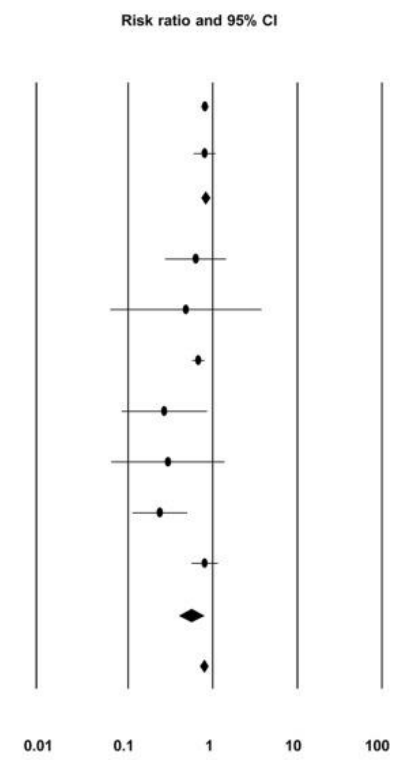
Study name	Post NSQIP	Pre NSQIP	Risk ratio	95% CI
No Intervention				
Guillamondegui, 2012	115 / 14901	134 / 14205	0.82	0.64, 1.05
Pooled estimate			**0.82**	**0.64, 1.05**
Intervention				
Bliss, 2012	1 / 73	4 / 246	0.84	0.10, 7.42
Ceppa, 2013	136 / 895	222 / 895	0.61	0.51, 0.74
Cima, 2013	0 / 198	1 / 531	0.89	0.04, 21.78
Compoginis, 2011	0 / 235	3 / 243	0.15	0.01, 2.84
Lutfiyya, 2012	1 / 195	5 / 430	0.44	0.05, 3.75
Wick, 2012	2 / 324	4 / 278	0.43	0.08, 2.32
Pooled estimate			**0.61**	**0.50, 0.73**
Overall pooled estimate			**0.68**	**0.58, 0.79**

Heterogeneity:
No intervention: I^2=0.0%, p-value=1.0
Intervention: I^2=0.0%, p-value=0.94
Overall: I^2=0.0%, p-value=0.57



Study name	Post NSQIP	Pre NSQIP	Risk ratio	95% CI
No Intervention				
Guillamondegui, 2012	432 / 14901	510 / 14205	0.81	0.71, 0.92
Henke, 2010	79 / 3409	71 / 2453	0.80	0.58, 1.10
Pooled estimate			**0.81**	**0.72, 0.91**
Intervention				
Berenguer, 2010	7 / 84	15 / 113	0.63	0.27, 1.47
Bliss, 2012	1 / 73	7 / 246	0.48	0.06, 3.85
Ceppa, 2013	150 / 895	222 / 895	0.68	0.56, 0.81
Cima, 2013	3 / 198	27 / 477	0.27	0.08, 0.87
Compoginis, 2011	2 / 235	7 / 243	0.30	0.06, 1.41
Lutfiyya, 2012	7 / 195	65 / 430	0.24	0.11, 0.51
Wick, 2012	44 / 324	47 / 278	0.80	0.55, 1.17
Pooled estimate			**0.55**	**0.39, 0.77**
Overall pooled estimate			**0.77**	**0.69, 0.86**

Heterogeneity:
No intervention: I^2=0.0%, p-value=0.96
Intervention: I^2=47.0%, p-value=0.08
Overall: I^2=50.7%, p-value=0.04



SOCIETÀ ITALIANA DI ORTOPEDIA E TRAUMATOLOGIA

SOCIETÀ | EVENTI & FORMAZIONE | AREA SOCI | AREA PAZIENTI | NEWS & MEDIA

Le Linee Guida

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AREA SOCIETÀ

Storia
About SIOT (English)

ORGANISMI SOCIETARI
Consiglio Direttivo
Consigli Direttivi dal 1892 al 2020
Delegazioni regionali
Comitati e Commissioni

DOCUMENTI COSTITUTIVI
Statuto

Scarica i pdf delle Linee Guida

- Linea Guida "Fratture del femore prossimale nell'anziano" (2022)
  Linea Guida pubblicata nel Sistema Nazionale Linee Guida – 10 gennaio 2022
- Linea Guida "Diagnosi, stratificazione del rischio e continuità assistenziale delle Fratture da Fragilità" (2021)
  Linea Guida pubblicata nel Sistema Nazionale Linee Guida – 18 ottobre 2021
- Linea Guida SIOT Prevenzione delle infezioni in chirurgia ortopedica (2021)
  Linea Guida pubblicata nel Sistema Nazionale Linee Guida – 21 maggio 2021

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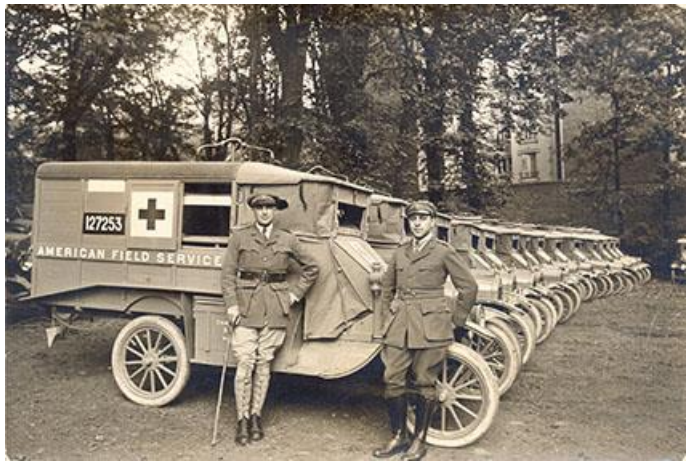
CASA DI CURA S. MARIA MADDALENA

G.L.O.B.E.

Cosa ci serve davvero?

“Politics rather than promising paradise should avoid hell”

(Mario Giro)



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Evitare l'inferno

There are certainly cases of gross misconduct and malpractice, and we must always protect our patients. We should neither apologize for nor excuse inappropriately performed surgeries. It is our professional, ethical, and moral duty to regulate surgeons who may routinely cause harm due to negligence or poor skill. However, poor patient outcomes occur at the hands of excellent surgeons as well, and we should always remember that the vast majority of orthopedic surgeons carry with them the same desire to do well by their patients and provide excellent care. **We challenge you to take into account all these considerations when speaking to patients about their previous orthopedic care.**

AMERICAN ORTHOPAEDIC FOOT & ANKLE SOCIETY

Foot & Ankle International®
2017, Vol. 38(4) 465–466

DOI: 10.1177/1071100717692749
journals.sagepub.com/home/fai

Orthopedics in Glass Houses

John Y. Kwon, MD[1], and Christopher P. Miller, MD[1]

When you judge others, you do not define them, you define yourself.

Wayne Dyer

"We got another disaster from the outside hospital," my resident reported (Figure 1). "Does this guy know anything about ankle fractures?" Upon examining the radiograph I paused to consider the situation that the surgeon may have found himself in. But what do I tell my patient? What lessons can my resident learn?

Much has been written regarding the disclosure of medical errors to patients, and there is increasing literature regarding disclosure of errors made by one's colleagues. Gallagher et al recently convened a panel of experts from various fields including patient safety, malpractice law, bioethics, and health policy and published various recommendations for disclosure of a fellow clinician's harmful errors.[1] The authors recommended improved colleague-to-colleague communication and transparent disclosure of errors as a shared professional responsibility with a collective approach to accountability.

Although the same ethical, moral, and legal issues apply regardless of medical subspecialty, the field of orthopedic surgery has unique considerations. Although the detection of substandard care in other specialties may require exhaustive examination of the medical record, often a single radiograph is all that is required in our field.

The assessment we make of a *radiograph* for healing, alignment, positioning of implants, etc is a by-product of our orthopedic training. It doesn't take much time to determine what was done, how well (or poorly) it was performed, and prognosticate on outcomes. However, the assessment we make of the *surgeon* who performed the surgery is a far more complex process and often subconscious in nature. During our weekly trauma rounds, I occasionally hear a trainee denounce a surgeon when examining a poor radiographic outcome, especially when performed at the well-known "outside" hospital. "Bad" surgeon (or usually a more descriptive term) is often what is said. However, although "bad" surgery may be closer to the truth of things at times, usually there is more to the story. In this context, for the sake of collegiality, consider the following when examining a colleague's work.

Resources

Great operative outcomes require a cohesive operative team doing a lot of complex tasks properly, all at the same time.

Figure 1. Ankle Radiograph.

Whether it be staff or equipment, other surgeons may simply not have access to resources that you have readily available and may take for granted.

When we fix ankle fractures at our institution, we can choose from 5 different ankle fracture plating systems. We operate with a senior Harvard orthopedic resident or fellow in combination with a dedicated orthopedic OR team. Additionally, we've had the opportunity to train with some of the greatest surgeons in the world. We better get it right, and most of the time we do. However, even with all of these available resources, sometimes

[1]Beth Israel Deaconess Medical Center, Harvard School of Medicine, Department of Orthopaedics, Boston, MA, USA

Corresponding Author:
John Y. Kwon, MD, Harvard Medical School, Chief, Division of Foot and Ankle Surgery, Department of Orthopaedics, Beth Israel Deaconess Medical Center, 330 Brookline Ave, Stoneman 10, Boston, MA 02215, USA.
Email:jykwon@bidmc.harvard.edu

G.L.O.B.E.

Piccola proposta personale

- Disaccoppiare indennizzo del danno dalla valutazione dell'errore, escludendo le complicanze
- Giusto indennizzo per tutti, invalidità civile ecc. a prescindere dalle responsabilità
- Valutazione dell'errore (e prevenzione della reiterazione) affidata ad organi competenti (direzioni sanitarie, ordine dei medici, società scientifiche…)
  - Azioni correttive
  - Sanzioni extrema ratio

THERMAE
DI SALSOMAGGIORE

TREDICESIMO CONVEGNO DI TRAUMATOLOGIA CLINICA E FORENSE

20° Corso di Ortopedia, Traumatologia e Medicina Legale

GRAZIE

EBM: complicanze ed errori, quali differenze da identificare in Chirurgia Ortopedica

Gustavo Zanoli, Roberto Biscione, Alessandro Gildone, Massimiliano Manfredini, Giovanni Corvelli, Fabio Santamaria, Giuseppe De Rito

G.L.O.B.E.