

Complication Registries in Orthopaedic Surgery. A Nordic Perspective

Ketil Holen

Department of Orthopaedic Surgery
University Hospital of Trondheim
N-7006 Trondheim, Norway



NOF Working Groups

- Education
- Guidelines
- **Complication Registry:**

Frank van Oosterhout (NL)

Aare Märtson (EE)

Søren Overgaard (DK)

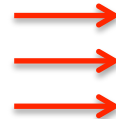
Ketil Holen (N)

NOF Working Groups – Complication Registry

- Present a first draft for discussion at the NOF Spring Meeting in Reykjavik May 2015
- Present a final draft at the NOF Congress in Linköping 2016
- **MAIN QUESTIONS:**
- Is it possible and worthwhile to establish a Nordic Complication Registry?
- If yes, how shall this registry be designed, what shall be registered?

Some Norwegian Medical Registries

There are around
60 medical registries
in Norway



Gode helseregistre
- bedre helse



[Om helseregistre](#) | [Personvern](#) | [Eksempler](#) | [Helseregisterprosjektet](#) | [Publikasjoner](#)

Nasjonale kvalitetsregistre

- Cerebralpareseregisteret i Norge (CPRN)
- Det norske hjertekirurgiregisteret
- Kvalitetsregister for demens
- Nasjonalt hjertestansregister
- Nasjonalt hoftebruddregister
- Nasjonalt korsbåndregister
- Nasjonalt kvalitetsregister for ryggkirurgi
- Nasjonalt medisinsk kvalitetsregister for barne- og ungdomsdiabetes
- Nasjonalt register for arvelige og medfødte nevrologiske sykdommer
- Nasjonalt register for barneskole
- Nasjonalt register for brystkreft
- Nasjonalt register for føflekkreft
- Nasjonalt register for gynekologisk kreft
- Nasjonalt register for hidradenitt
- Nasjonalt register for HIV
- Nasjonalt register for invasiv kardiologi
- Nasjonalt register for kronisk obstruktiv lungesykdom (KOLS)
- Nasjonalt register for langtids mekanisk ventilasjon
- Nasjonalt register for leddproteser
- Nasjonalt register for lungekreft

Sentrale helseregistre

- - Genetisk masseundersøkelse av nyfødte (har ingen egen landingsside)
- Dødsårsaksregisteret
- Forsvarets helseregister (Har ikke egen nettside, kontakt Forsvarets sanitet)
- Helsearkivregisteret (har ikke egen landingsside)
- Hjerne- og karregisteret (HKR)
- Kreftregisteret (med underliggende nasjonale kvalitetsregistre)
- Medisinsk fødselsregister
- Meldingssystem for smittsomme sykdommer (MSIS)
- Nasjonalt vaksinasjonsregister (SYSVAK)
- Norsk overvåkningssystem for antibiotikaresistens hos mikrober (NORM)
- Norsk overvåkningssystem for infeksjoner i sykehustjenesten (NOIS)
- Norsk pasientregister (NPR)
- Pseudonymt register for pleie- og omsorgssektoren (IPLOS)
- Register over svangerskapsavbrudd (Abortregisteret)
- Reseptbasert legemiddelregister (Reseptregisteret)
- Resistensovervåkning av virus i Norge (RAVN)

Nyheter

Årsstatistikk Medisinsk Fødselsregister 2013
Andelen dødfødte og barn som dør innen første leveuke har aldri vært lavere. Det viser 2013-statistikken fra Medisinsk fødselsregister. [Les mer på fhi.no](#)

Årsstatistikk Hjerne- og karregisteret 2013
Hjerne- og karregisteret publiserer statistikk for alle som har vært i kontakt med spesialisthelsetjenesten for disse sykdommene. [Les mer på fhi.no](#)

Dødsårsaker 2013
Det er små endringer i forhold til tidligere år: trenden med nedgang i hjerteinfarkt og hjerne slag fortsetter. Det er ingen nedgang i lungekreft og kronisk obstruktiv lungesykdom (kols). [Les mer på fhi.no](#)

Tuberkulose – årsstatistikk for 2013
Tuberkulosestatistikken for 2013 viser fortsatt stigning i antall sykdomstilfeller, samtidig som forekomsten blant norskfødte fortsatt er blant de laveste i verden. [Les mer på fhi.no](#)

Infeksjoner etter kirurgiske inngrep, NOIS-2013
 Dette er første gang data fra Norsk overvåkningssystem for antibiotikabruk og helsetjenesteassosierte infeksjoner (NOIS) gjennom et helt år (2013) presenteres. [Les mer på fhi.no](#)




There are many registries in cardiology



Editorial from European Heart Journal

European Heart Journal (2000) **21**, 1399–1401

doi:10.1053/euhj.2000.2265, available online at <http://www.idealibrary.com> on 

Are data from clinical registries of any value?

See pages 1440, 1450 and 1458 for the articles to which this Editorial refers

‘The answer you get depends on the question you ask’

The question asked in the title of this editorial might be phrased differently: why bother to collect registry data at all? Is it of any use to clinicians and health care administrators/planners? Indeed, one might argue that only data from prospective, community-wide studies performed over decades such as the Framingham Heart Study are valid and therefore useful. However, my answer to these rhetorical questions is in the affirmative: collection of registry data does serve a number of useful purposes, but it is essential that we bring a critical understanding to the interpretation of such data. Let us examine the question further. I believe that registry data has at least 10 important functions:

detail in prospective, community-wide studies or by means of national health statistics.

(2) Registries reveal the degree to which clinicians are managing a particular disease in accordance with the principles of evidence based medicine, information that is of great use to health care administrators/planners.

(3) Registries are able to collect data on large numbers of patients rapidly and efficiently thereby producing a picture of a disease and its management at a particular moment in time. Repeated registry samples provide a dynamic estimate of changing patterns of disease demographics and therapy.

(4) Registry data enable individual clinicians to compare their own patient population and therapeutic strategies with that of other practitioners possibly enabling these physicians to modify their practice patterns.

(5) Registries provide insights for clinical investi-



Key suggestions for good registry design.

Alpert JS. Eur Heart J. 2000;21(17):1399-1401

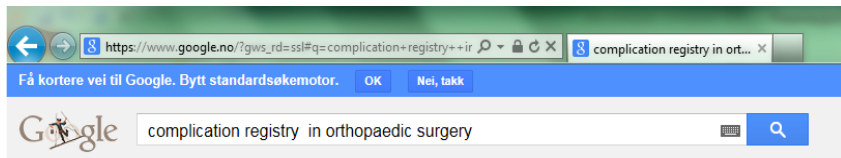
- Standardize disease definitions
- Standardize sampling techniques
- Clear definition of participating hospitals
- Reporting ALL collected data
- Centralization of all data and analysis
- A professional statistician should be monitoring all data collection and analysis

...good registry design cont.

- The accuracy and completeness of individual data sheets should be examined by a central office
- Review and approval of the registry protocol at each participating site
- Report the names of all participating investigators
- A PI or steering committee should maintain overall control of all facets of the registry's running
- Any sponsorship of the registry should be disclosed on all reports



Search on Google and PubMed:



Predicting medical complications after spine surgery: a ...
www.ncbi.nlm.nih.gov/pubmed/24239799 - Oversett denne siden
av MJ Lee - 2014 - Sitert av 1 - Beslektede artikler
13. nov. 2013 - (1)Department of Orthopaedic Surgery and Sports Medicine, University of ... using a prospective surgical spine registry that recorded extensive ...

Complications and functional outcomes after total hip ...
www.ncbi.nlm.nih.gov/pubmed/21290028 - Oversett denne siden
av F Susmer - 2010 - Sitert av 42 - Beslektede artikler
Complications and functional outcomes after total hip arthroplasty and total knee ...
The Global Orthopaedic Registry (GLORY) has been designed to monitor a broad ...
Functional outcomes improved after surgery in both groups, as expected.

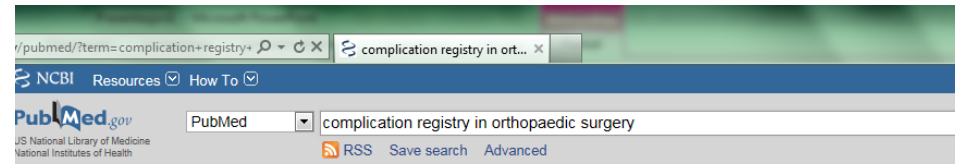
[PPT] Dutch Orthopedic Surgery - UEMS Specialist Section of ...
www.uems-ortho.org/data/.../Netherlands.ppt - Oversett denne siden
Orthopaedic surgery ... Complication registration, implant registration, DVT prophylaxis, infection prophylaxis, patient education for hip and knee surgery.

National joint registry in the US makes progress, but faces ...
www.healio.com/orthopedics/.../orthopedics.../nation... - Oversett denne siden
Orthopedics Today | Although many regional and institutional joint ... implants, surgeon case volume, hospital case volume, complications and re-operations).

[PDF] Overview of the Global Orthopaedic Registry (GLORY)
www.amjorthopedics.com/.../qhi.../039090002s.pdf - Oversett denne siden
av FA Anderson Jr - Sitert av 1 - Beslektede artikler
little information about a wide range of surgical practices, ... tices, complications, and outcomes. ... International Orthopaedic Registry (IOR) and The Hip.

Revision Surgery After Total Joint Arthroplasty: A ...
www.arthroplastyjournal.org/article/S0883.../abstract... - Oversett denne siden
av P Sadoghi - 2013 - Sitert av 24 - Beslektede artikler
Revision Surgery After Total Joint Arthroplasty: A Complication-Based Analysis Using ... Department of Orthopaedic Surgery, Medical University of Graz, Austria ... Level III study — Retrospective analysis of prospectively collected registry data.

PLoS ONE: Surgical Site Infections and Other Postoperative ...
journals.plos.org/plosone/article?id=10.../3711... - Oversett denne siden
9. apr. 2014 - From the Global Orthopaedic Registry (GLORY) we reviewed 3,755



Article types
Clinical Trial
Review
Customize ...

Text availability
Abstract
Free full text
Full text

Publication dates
5 years
10 years
Custom range...

Species
Humans

Clear all

Show additional filters

Summary ▾ 20 per page ▾ Sort by Most Recent ▾

Send to: ▾

Results: 1 to 20 of 89

<< First < Prev Page 1 of 5 Next > Last >>

[Do Complication Rates Differ by Gender After Metal-on-metal Hip Resurfacing Arthroplasty? A](#)

1. [Systematic Review.](#)
Haughom BD, Erickson BJ, Hellman MD, Jacobs JJ.
Clin Orthop Relat Res. 2015 Mar 11. [Epub ahead of print]
PMID: 25758375
[Related citations](#)

[Similar clinical outcomes for THAs with and without prior periacetabular osteotomy.](#)
2. Amanatullah DF, Stryker L, Schoenecker P, Taunton MJ, Clohisy JC, Trousdale RT, Sierra RJ.
Clin Orthop Relat Res. 2015 Feb;473(2):685-91. doi: 10.1007/s11999-014-4026-7. Epub 2014 Oct 31.
PMID: 25359629
[Related citations](#)

[\[German Total Ankle Replacement Register of the German Foot and Ankle Society \(D.A.F.\) - presentation of design and reliability of the data as well as first results\].](#)
3. Kostuj T, Preis M, Walther M, Aghayev E, Krummenauer F, Röder C.
Z Orthop Unfall. 2014 Oct;152(5):446-54. doi: 10.1055/s-0034-1382933. Epub 2014 Oct 14. German.
PMID: 25313699
[Related citations](#)

[The association between hospital care intensity and surgical outcomes in medicare patients.](#)
4. Sheetz KH, Dimick JB, Ghafari AA.
JAMA Surg. 2014 Dec;149(12):1254-9. doi: 10.1001/jamasurg.2014.552.
PMID: 25272279
[Related citations](#)

[Revisions of monoblock metal-on-metal THAs have high early complication rates.](#)
5. Stryker LS, Odum SM, Fehring TK, Springer BD.
Clin Orthop Relat Res. 2015 Feb;473(2):469-74. doi: 10.1007/s11999-014-3791-7.
PMID: 25028106
[Related citations](#)

[Evaluation of immediate postoperative complications and outcomes among military personnel treated for spinal trauma in Afghanistan: a cohort-control study of 50 cases.](#)
6. Schoenfeld AJ, Mok JM, Cameron B, Jackson KL, Serrano JA, Freedman BA.
J Spinal Disord Tech. 2014 Oct;27(7):376-81. doi: 10.1097/BSD.0b013e3182a355c6.
PMID: 24999556
[Related citations](#)

[Medicaid status is associated with higher surgical site infection rates after spine surgery.](#)
7. Manoso MW, Cizik AM, Bransford RJ, Bellabarba C, Chapman J, Lee MJ.

Registration of Complications

- Do we need a Nordic Complication Registry?
- **To me, the answer is: YES**
- The health authorities will soon be asking for it, and by doing this now, we can be "up front"
- What can we learn from GLORY?
- **What can we learn from the Dutch Complication Registry?**

The Global Orthopaedic Registry

Home

Overview

Confidentiality

Bibliography

Advisors

Resources

Hospital Map

MEMBERS ROOM

Home - COR

The **Global Orthopaedic Registry** is a multinational, observational database of outcomes for patients who undergo elective, primary hip and/or knee arthroplasty. **GLORY** includes over 100 hospitals in 12 countries. Participating physicians receive confidential quarterly reports showing their outcomes side-by-side with the aggregate outcomes of all participating hospitals. GLORY online Data Submissions are secured using Secure Sockets Layer (SSL) technology.

Recent Publications

- [Overview of the GLOBAL Orthopaedic Registry \(GLORY\)](#)
- [Complications and functional outcomes after total hip arthroplasty and total knee arthroplasty: results from the...](#)
- [Practice patterns in the use of venous thromboembolism prophylaxis after total joint arthroplasty--insights from...](#)
- [Orthopaedic practice in total hip arthroplasty and total knee arthroplasty: results from the Global Orthopaedic...](#)
- [Lessons learned from the global orthopaedic registry: study design, current practice patterns, and future directions](#)
- [More Publications](#)

Quick Links

- [Lessons from the Global Orthopaedic Registry \(GLORY\) supplement to the American Journal of Orthopedics, September 2010.](#)

GLORY is supported by a grant from Sanofi and managed by the Center for Outcomes Research, University of Massachusetts Medical School
For general questions and information: GLORY@umassmed.edu • 508.856.1336 • 55 Lake Ave North S3-138, Worcester, MA 01655
Copyright 2001-2015 Center for Outcomes Research, University of Massachusetts Medical School

GLORY Hospitals

The Global Orthopaedic Registry

GLORY HOSPITALS – 115 hospitals enrolled – 103 hospitals mapped

- Click on an icon to get information about a GLORY Hospital
- Use the controls in the upper left-hand corner of map to pan and zoom



Information: GLORY@umassmed.edu • 508.856.1336 • 55 Lake Ave North 53-138, Worcester, MA 01655
©2001-2015 Center for Outcomes Research, University of Massachusetts Medical School

The Global Orthopaedic Registry

GLORY HOSPITALS – 115 hospitals enrolled – 103 hospitals mapped

- Click on an icon to get information about a GLORY Hospital
- Use the controls in the upper left-hand corner of map to pan and zoom



Information: GLORY@umassmed.edu • 508.856.1336 • 55 Lake Ave North 53-138, Worcester, MA 01655
©2001-2015 Center for Outcomes Research, University of Massachusetts Medical School



GLORY:

Goals and Objectives

Goals and Objectives

The **Global Orthopaedic Registry (GLORY)** provides an opportunity to collect, analyze, and disseminate data on patients who undergo THA or TKA. Continued surveillance of the effectiveness of practices and evaluation of causes for suboptimal outcomes are critical steps toward improving health care. The goal of **GLORY** is to improve patient care through a better understanding of patient demographics, management, and in-hospital and post-discharge outcomes. Comparison of individual hospital data with aggregate registry data should favorably impact the quality of patient care on both a local and national scale. Once issues are identified, corrective actions can be recommended to surgeons who can implement changes and assess their impact.

The objectives of **GLORY** are to:

- Provide expanded data to orthopaedic surgeons to characterize existing and evolving practice patterns, delivery of care, and resource utilization in the management of THA/TKA patients
- Provide data to support internal and external standards and benchmarking of treatment patterns and patient outcomes
- Analyze data and design ancillary studies to address unanswered clinical questions
- Disseminate findings through publication in peer-reviewed scientific journals



GLORY evaluation from UMASS Center for Outcomes Research



Center for Outcomes Research

Assessing today's practices to enhance tomorrow's care.

[About COR](#)

[Risk Assessment Models](#)

[VTE Education](#)

[Projects](#)

[ALS C.A.R.E.](#)

[Discharge-Alert](#)

[ENDORSE](#)

[Euro-STAT](#)

[Glioma Outcomes](#)

[GLORY](#)

[GLOW](#)

[GRACE](#)

[IMPROVE](#)

[PRISM](#)

[STAT](#)

[TRACE-CORE](#)

[Home - COR](#)

Recent Publications

High-grade atrioventricular block in acute coronary syndromes: insights from the Global Registry of Acute Coronary Events

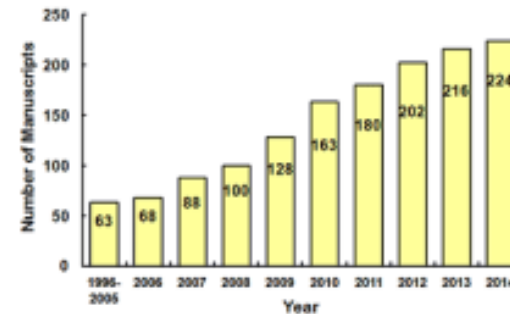
The Agency for Healthcare Research and Quality Inpatient Quality Indicator #11 overall mortality rate does not accurately assess mortality risk after ...

GRACE score predicts heart failure admission following acute coronary syndrome

Beta-blocker Use in ST-segment Elevation Myocardial Infarction in the Reperfusion Era (GRACE)

[More Publications](#)

Cumulative Peer Reviewed Scientific Manuscripts



Launched in 2001, the Global Orthopaedic Registry gathers data on demographics, diagnosis, surgical management and outcomes of patients undergoing hip or knee arthroplasty in participating hospitals in 12 countries.

Publication from the Glory Registry

OPEN ACCESS Freely available online

PLOS ONE

Surgical Site Infections and Other Postoperative Complications following Prophylactic Anticoagulation in Total Joint Arthroplasty



Zhong Wang^{1*}, Frederick A. Anderson Jr.², Michael Ward¹, Timothy Bhattacharyya¹

¹ Clinical Trials and Outcomes Branch, Intramural Research Program, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, Maryland, ² Center for Outcomes Research, University of Massachusetts Medical School, Worcester, Massachusetts

Abstract

Background: Anticoagulants reduce the risk of venous thromboembolism (VTE) after total joint replacement. However, concern remains that pharmacologic VTE prophylaxis can lead to bleeding, which may impact on postoperative complications such as infections and reoperations.

Methods and Findings: From the Global Orthopedic Registry (GLORY), we reviewed 3,755 patients in US who elected for primary total hip or knee arthroplasty, received either warfarin or low molecular weight heparin (LMWH) as VTE prophylactics, and had up-to-90-day follow-up after discharge. We compared incidence rates of VTE, infections and other complications between LMWH and warfarin groups, and used multivariate analyses with propensity score weighting to generate the odds ratio (OR). Patients receiving LMWH tended to be older and higher in the American Society of Anesthesiologists grade scores. In contrast, warfarin was used more frequently for hip arthroplasty with longer duration among patients with more pre-existing comorbidity (all $P < 0.02$). A weight variable was created with propensity score to account for differences in covariate distributions. Propensity score-weighted analyses showed no differences in VTE complications. However, compared to warfarin, LMWH was associated with significantly higher rates of bleeding (6.2% vs. 2.1%; OR = 3.82, 95% confidence interval [CI], 2.64 to 5.52), blood transfusion (29.4% vs. 22.0%; OR = 1.75, 95% CI, 1.51 to 2.04), reoperations (2.4% vs. 1.3%; OR = 1.77, 95% CI, 1.07 to 2.93) and infections (1.6% vs. 0.6%; OR = 2.79, 95% CI, 1.42 to



Surgical site infections and other postoperative complications following prophylactic anticoagulation in total joint arthroplasty

Zhong Wang et al. PLOS One 2014;9(4):e91755

- All results based on 3755 US-patients registered in GLORY
- Compared to warfarin, LMWH was associated with significantly higher rates of bleeding, blood transfusions, reoperations and infections after THA/TKA

Another approach to complications in orthopaedic surgery

AAOS

AMERICAN ACADEMY OF
ORTHOPAEDIC SURGEONS



**Avoid the
complications**



AAOS: "Zero in on Zero"

Efforts to reduce Complications

Mark A Snyder, Cincinnati, Ohio

- **How to establish a "Center of Excellence"?**
- 10 targets for improvement -> eliminate the problem entirely
- For all 10 targets, contributing factors before, during and after surgery were identified
- All targets were analyzed, giving a list of best practice proposals for each target

AAOS: "Zero in on Zero"

Efforts to reduce complications

Table 1: "Zero in on zero" targets for improvement

Target	Starting point	Goal
Infected primary THA and TKA	As high as 3 percent in some months	0 percent—and no hospital-acquired MRSA infections
In-hospital and 30-day postoperative deaths from venous thromboembolism	Less than 0.1 percent for total joint cases	None—0 percent
Primary THA early prosthetic dislocation	Although some surgeons had rates less than 1 percent, others had rates as high as 6 percent	0 percent rate for uncomplicated primary cases
Postoperative pain management	Varying strategies, often resulting in poor pain control	100 percent of patients treated with a multimodal pain management program
Allogenic transfusions	Variable, ranging as high as 2 percent for some surgeons	0 percent in primary unilateral THA and TKA; less than 10 percent in bilateral TKA and revision surgeries
30-day readmission	Less than 2 percent	0 percent readmission for VTE, dislocation, and infected total joints; minimal cardiac event readmissions
Orthopaedic unit falls	Not known; estimated at greater than 5 percent	Eliminate entirely—achieve 0 percent rate
Unsatisfied patients	Approximately 15 percent	Reduce to 0 percent
Poor discharge handoffs	Less than 5 percent	Improve to 0 percent
Catheter-associated urinary tract infections	Less than 5 percent	Eliminate entirely

Kaiser Permanente Registries

The Joint Commission Journal on Quality and Patient Safety

2012 John M. Eisenberg Patient Safety and Quality Awards

Kaiser Permanente Implant Registries Benefit Patient Safety, Quality Improvement, Cost-Effectiveness

Innovation in Patient Safety and Quality at the National Level

Elizabeth W. Paxton, MA; Mary-Lou Kiley, MBA; Rebecca Love, MPH, RN; Thomas C. Barber, MD; Tadashi T. Funahashi, MD; Maria CS Inacio, MS



From left: Tadashi Funahashi, MD, Chair, Inter-Regional Chief of Orthopedic Surgery, and Assistant Regional Medical Director, Kaiser Permanente Southern California; Mary-Lou Kiley, MBA, Group Leader, National Implant Registries; Elizabeth Paxton, MA, Director, National Implant Registries; Jed Wausberg, MD, Senior Vice President, Hospitals, Quality and Care Delivery Excellence, Kaiser Foundation Health Plan and Hospitals; Thomas Barber, MD, Associate Physician in Chief, Kaiser Permanente East Bay

Each year more than 900 implantable medical devices are approved by the US Food and Drug Administration (FDA).¹ Medical devices are integral to patient care. It is estimated that annually 1,131,000 people in the United States receive a total joint replacement (TJR) or pacemaker and pacemaker lead implant; this figure is projected to increase significantly during the next decade.^{2,3} Medical device implantation accounts for a large portion of hospital costs. For example, the average cost for TJR implants is \$6,584 for total hip replacement (THR) and \$9,547 for total knee replacement (TKR),⁴ and these procedures are responsible for the largest hospital expenditure category for Medicare of overall hospital charges.⁵ The cost of implantable devices and their related procedures is expected to reach more than \$100 billion in the United States within the next year.⁶

Although the majority of medical devices are safe, some fail, resulting in significant pain, suffering, and even death. Between

Article-at-a-Glance

Background: In response to the increased volume, risk, and cost of medical devices, in 2001 Kaiser Permanente (KP) developed implant registries to enhance patient safety and quality, and to evaluate cost-effectiveness.

Methods: Using an integrated electronic health record system, administrative databases, and other institutional databases, orthopedic, cardiology, and vascular implant registries were developed in 2001, 2006, and 2011, respectively. These registries monitor patients, implants, clinical practices, and surgical outcomes for KP's 9 million members. Critical to registry success is surgeon leadership and engagement; each geographical region has a surgeon champion who provides feedback on registry initiatives and disseminates registry findings.

Results: The registries enhance patient safety by providing a variety of clinical decision tools such as risk calculators, quality reports, risk-adjusted medical center reports, summaries of surgeon data, and infection control reports to registry stakeholders. The registries are used to immediately identify patients with recalled devices, evaluate new and established device technology, and identify outlier implants. The registries contribute to cost-effectiveness initiatives through collaboration with sourcing and contracting groups and confirming adherence to device formulary guidelines. Research studies based on registry data have directly influenced clinical best practices.

Conclusions: Registries are important tools to evaluate longitudinal device performance and safety, study the clinical indications for and outcomes of device implantation, respond promptly to recalls and advisories, and contribute to the overall high quality of care of our patients.

The Kaiser Permanente Implant Registries: Effect on Patient Safety, Quality Improvement, Cost Effectiveness, and Research Opportunities

Elizabeth W Paxton, MA; Maria CS Inacio, MS; Mary-Lou Kiley, MBA

Perm J 2012 Spring;16(2):36-44

Abstract

Introduction: Considering the high cost, volume, and patient safety issues associated with medical devices, monitoring of medical device performance is critical to ensure patient safety and quality of care. The purpose of this article is to describe the Kaiser Permanente (KP) implant registries and to highlight the benefits of these implant registries on patient safety, quality, cost effectiveness, and research.

Methods: Eight KP implant registries leverage the integrated health care system's administrative databases and electronic health records system. Registry data collected undergo quality control and validation as well as statistical analysis.

Results: Patient safety has been enhanced through identification of affected patients during major recalls, identification of risk factors associated with outcomes of interest, development of risk calculators, and surveillance programs for infections and adverse events. Effective quality improvement activities included medical center- and surgeon-specific profiles for use in benchmarking reports, and changes in practice related to registry information output. Among the cost-effectiveness strategies employed were collaborations with sourcing and contracting groups, and assistance in adherence to formulary device guidelines. Research studies using registry data included postoperative complications, resource utilization, infection risk factors, thromboembolic prophylaxis, effects of surgical delay on concurrent injuries, and sports injury patterns.

Conclusions: The unique KP implant registries provide important information and affect several areas of our organization, including patient safety, quality improve-

more costly devices are introduced into the market with little to no evidence of enhanced clinical effectiveness.

In addition, new technology sometimes fails, requiring recalls of medical devices. In 2011 a total of 41 Class 1 recalls happened in the US.⁷ Recalls of medical devices can put patients at major risk of complications and mortality. Although some recalls require only patient consultations, others can require close monitoring of patients, and in some more serious cases a high-risk reoperation. Early identification of device failures is therefore necessary to prevent implantation of defective devices and harm to patients.

Considering the high cost, volume, and patient safety issues associated with medical devices, monitoring of medical device performance is critical to ensure patient safety and quality of care. One method for tracking these devices is the use of patient registries. A patient reg-

Values/benefits from registries

- Benefit patient safety
- Improve patient quality
- Improve cost-effectiveness

- Boneloc/
- *Paxton EW et al. The Joint Commision 2013; 39(6):246-52.*

A Nordic Orthopaedic Complication Registry: Something for The Nordic Council?

- News and Events
- Images
- Newsletters
- Calendar
- News
- Videos
- Twitter
- Facebook
- Articles
- Press Room
- Blogs

This content is not available in your chosen language, we are displaying it in Norwegian.

Bent Høie positiv til samarbeid om høyspesialisert pasientbehandling



Helseminister Bent Høie er positiv til mer omfattende nordisk samarbeid om innkjøp av legemidler, investeringer i medisinsk teknologi og klinisk forskning.

Apr 04, 2014



Under samtalen med Bo Kønberg, tok helseminister Bent Høie opp viktigheten av at pasienter har mulighet til en såkalt second opinion.

SEARCH IN NEWS

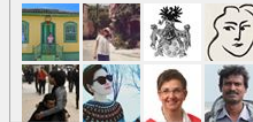
Find os på Facebook



The Nordic Council of Ministers and The Nordic Council

Synes godt om

2.111 personer synes godt om The Nordic Council of Ministers and The Nordic Council.




SUBSCRIBE TO NEWSLETTERS


[Subscribe to Nordic news and newsletters.](#)

FREE IMAGES

[Image database with high-resolution images of Nordic environment, politicians and events for free use.](#)

RECENT PUBLICATIONS

 Assessment and Review under a 2015 Climate Change Agreement: Lessons Learned and Ways Forward
Mar 25, 2015

 Assessment and Review under a 2015 Climate Change Agreement: Lessons Learned and Ways Forward



Nordic health-care cooperation?

Tidligere helseminister i Sverige, Bo Könberg, har på oppdrag av Nordisk ministerråd forfattet en nordisk helseutredning som oppfordrer til samarbeid på tvers av landegrensene for å skape bedre folkehelse og videreutvikle helseomsorgen.

Les rapporten her: [Det framtida nordiska hälsosamarbetet](#)

Rapporten kommer med 14 konkrete forslag til samarbeidsområder. Et av forslagene går ut på en massiv samlet innsats med mål om å begrense bruken av antibiotika for å hindre den økende antibiotikaresistensen, som Könberg mener er vår tids største helsetrussel. Hvert år dør 25.000 mennesker i Europa pga. antibiotikaresistens

Vil ha økt samarbeid

“ – I Nordisk råd er vi veldig glade for at denne rapporten har kommet. Flere av forslagene om samarbeid i rapporten har allerede blitt fremmet av oss, blant annet forslag for å begrense antibiotikaresistens. Ministerne må prioritere det nordiske samarbeidet i større grad, også økonomisk, sa Sonja Mandt (Ap), parlamentariker i Nordisk råd. ”

Leder av Arbeiderpartiets helsefraksjon, Torgeir Micaelsen, uttrykte undring over at Norden ikke allerede har etablert et omfattende samarbeid på helseområdet, og trakk frem legemidler som et område der de nordiske land har mye å tjene på økt samarbeid.

- ***“In The Nordic Council we are very happy for this report. Several of the suggestions about cooperation have previously been proposed by us, among others the suggestion of efforts to minimize the resistency of antibiotics. The Ministers have to give the Nordic cooperation much higher priority, also economically”***, said Sonja Mandt (Ap), member of The Nordic Council.

Can this information help us in "building" a Nordic Complication Registry?

- Apply for funding (from The Nordic Council?)
- Make a common sheet for registration (ref. The NOV experience), general agreement of what to register
- Establish a steering group/PI
- Start up with pilot hospitals (one in each country?)
- Pilot period: one year?
- Evaluation -> publication -> conclusion
- If positive conclusion, a common Nordic start-up?

Conclusions

- In conclusion, we have learned that registries in orthopaedics are helpful tools
- A complete Complication registry will give us a lot more data concerning all types of complications related to orthopaedic surgery
- This will improve the hospitals awareness on such complications, and probably minimize the numbers of complications -> improved healthcare

Conclusions

- The Registry have to be 100% digital, no paper accepted
- How to secure that all patients are registered?
 - Proposal: no registration, no payment
- To achieve this, we need political support (lobbying)

**So let's go for a
Nordic Complication Registry
in
Orthopaedic Surgery**

