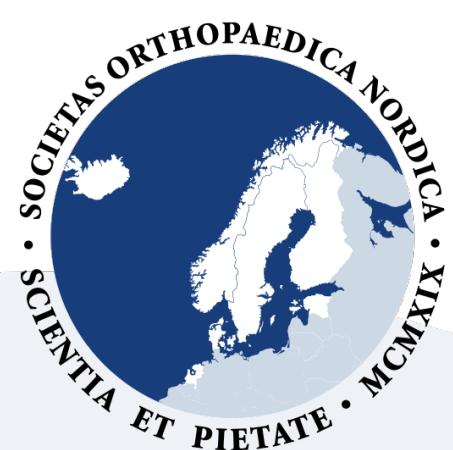




The Nordic Orthopaedic Federation



# Complication registration ‘THE DUTCH WAY’

FRANK VAN OOSTERHOUT, NETHERLANDS ORTHOPAEDIC SOCIETY



# Presentation summary

- Why complications registration?
- What is a complication?
- How to register complications?
- What to do with the registered data?
- How to give feedback on complication registries?

# Why complications registration?





# Why complication registration?

- Because we are told to do so?
- Because it is one of the aspects in teaching the residents?
- Because it gives information for patients for choosing a hospital?
- Or can we improve care by analyzing our complications?



# Legally obliged?

- Dutch hospitals are obliged to facilitate complication registration
- Dutch Healthcare Inspectorate checks by quality indicators
- NOV checks by quality visitations
- Although not legally, complication registration is mandatory



# Complication

- A complication is an unwanted and unintentional, but before known, patient related outcome during or following **actions** performed by a healthcare professional that makes a change in the treatment plan necessary or that results in irreversible injury to the patient
- *Blaming is out of the question*



# Error

- An error is “not or wrong accomplishing a planned action”
- *Blaming might be a question*



# Looking in a different way

- A complication is a new diagnosis related to a treatment (action)
- This diagnosis can be outside the domain of the primary care(giver)
- A complication can be determined by an other caregiver
- Giving care without complications is impossible



# MasterClassification of complications

- All medical specialties have this MasterClassification
- Description is specialty specific
- Every description has its MC
- MasterClassification consists of three axes, pathologie, localisation, external factors
- MC localisation consists of four subaxes, body part, organ(system), tissue type, body surface



# MasterClassification is generic

- Axis coding and description identical for all specialties
- Main description may differ between specialties
- E.g. pulmonary embolism description may differ between orthopaedics, urology, surgery but MC coding is always identical



# Pulmonary embolism

- 1.03
- 2a.02.02.0
- 2b.06.02
- 2c.05.01

trombosis/embolism  
chest  
lower airway  
bloodvessel



# How to register complications?

- Preferable digital, immediate and together with other and existing clinical data
- Using already known data of the patient, the care giver, the treatment period
- In terminology well known to the healthcare professional
- In a technical way that makes the data easy accessible for reporting
- In EMR

Orthopeed - BEATRIXZIEKENHUIS - HiX\_TEST 21-04-2015 18:30 - 6.0 HF25.2 - HiX - ChipSoft

 A. Verhoeff-Huisman  
6127480

Verhoeff-Huisman, A.	6127480
01-05-1931	83 jr
0184613243	
Orthopedie	
04-01-2015 : 04-02-2015	
Voorblad	
Naslag	
Status	
PROM	
Metingen	
EPD Dashboard	
Complicates	x
21-04-2015 : Heup - Totale...	
Actieve diagnoses	
01-2015 coxartrose - H	
Relevante voorgeschiedenis	
Overige voorgeschiedenis...	

Patiëntselectie

- Recent
- Polikliniek
- Kliniek
- OK
- SEH
- Eigen lijsten
- Zoeken

Overzichten

- Todo
- Rapportages

Aandachtspunten

K : E.J. Uitterlinden (Interne specialist, ORT)  
H : E.J.A. Vroom (Huisarts)  
P : E.J. Uitterlinden (Interne specialist, ORT)

Behandelers

Laatste conclusie : 19-01-2015: Dus coxogene klachten.  
Laatste beleid : Beleid (04-02-2015); Totale heupprothese rechts . Complicates, risico's en alternatieven werden besproken.

Behandelbeperking

Isolatie-indicatie

Allergieën

Gemarkeerde antwoorden

Eerdere orthopedische operaties

Eerdere operaties : 21-04-2015: Heup - Totale Heupprothese Zonder Cement - Rechts

Actuele medicatie

PARACETAMOL TABLET 500MG (ORAL), Zo nodig 4 x per dag 1000 milligram

HYDROCHLOORTHIAZIDE TABLET 12,5MG (ORAL), 1 x per dag 12,5 milligram

PIRITRAMIDE INJVLST 10MG/ML AMP 2ML (INTRAVENEUS), volgens schema volgens pca-b protocol

PARACETAMOL TABLET 500MG (ORAL), 4 x per dag 1000 milligram oraal of rectaal

1000 mg CEFAZOLINE 1000 mg/100 ml (INTRAVENEUS), 3 x per dag 1000 mg

NADROPARINE INJVL WWSP 5700IE=0,6ML (9500IE/ML) (SUBCUTAAN), 1 x per dag 0,6 milliliter hoog risico profylaxe gedurende 6 weken

ISOSORBIDEMONONI TRAAT CAPSULE MGA 50MG (ORAL), 1 x per dag

Recente Resultaten

21-04-2015 07:00 Laboratorium

04-02-2015 12:04 ICC poliklinisch

04-02-2015 12:38 Laboratorium

04-02-2015 12:40 Laboratorium

19-01-2015 13:49 ICC poliklinisch

09-01-2015 16:10 Echo heup re+inje

05-01-2015 Bekken/heupen

Datum

Codelijst

Complicates

Ernst

Obductie

Abstineren

Doodsoorzaak

Gerelateerd aan

Opmerking

Datum : 22-04-2015 Arts : RNL Nels, R.

Codelijst : ORT Complicates

Complicates : Diepe wondinfetie heup

Ernst : herstel na (re)operatie (chirurgische interventie op OK)

Obductie

Abstineren

Doodsoorzaak

Gerelateerd aan : Operaties Uitgevoerd: 21-04-2015 08:08:00 HEUP - TOTALE HEUPPROTHESE ZONDER CEMENT - RECHTS/Materiaalcode TOTALE HEUP

Opmerking : Only for testing purposes van Oosterhout

Toevoegen
Uitgebreid
Oude acties
Sluiten
Detail
OK
OK + Nieuw
Annuleren

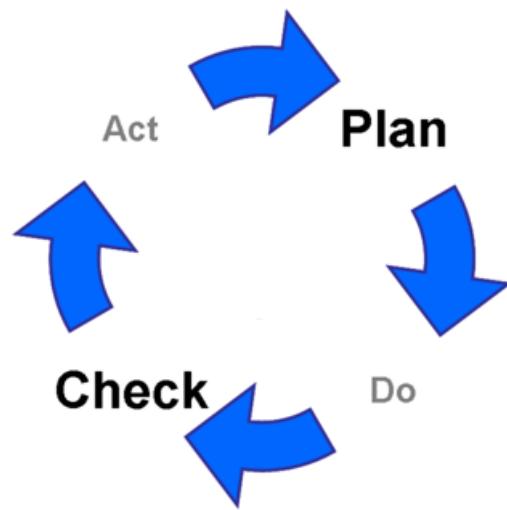
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22-4-2015



# What to do with the registered data?

- Make monthly or quarterly reports
- Organize monthly or quarterly complication conferences
- If something peculiar pops up, continue with a classic Deming quality circle, also known as “plan-do-check-act”

# Deming circle





# Feed back on complication registries? 🌳

- Complication registration first, but not only, as internal improvement instrument?
- Can practices be compared on basis of their registered complications?
- If so, we need to speak the same ‘language’
- If so, we need to correct for case mix factors, e.g. comorbidity, smoking, medication
- If so, we need to give feedback with benchmark information



## Summary

- Complications are inevitable and well known
- Complications are not only the dark side of orthopaedic surgery...they can show us the way to improvements
- But only if we use standardized definitions and registrations
- For comparison of practices based on their complications...we have a long way to go



# Complication registration

## 'THE NOF WAY?'

WORKING GROUP ON COMPLICATION REGISTRATION