



The Nordic Orthopaedic Federation



Complication registration

‘THE DUTCH WAY’

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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 trombosis/embolism
- 2a.02.02.0 chest
- 2b.06.02 lower airway
- 2c.05.01 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

A. Verhoeff-Huisman
6127480

Verhoeff-Huisman, A.
 6127480 01-05-1931
 0184613243 83 jr
Orthopedie
 04-01-2015 : 04-02-2015
 Voorblad
 Naslag
 Status
 PROM
 Metingen
 EPD Dashboard
 Complicaties
 21-04-2015 : Heup - Totale...

Behandelaars
 K : E.J. Uitterlinden (Interne specialist, ORT)
 H : E.J.A. Vroom (Huisarts)
 P : E.J. Uitterlinden (Interne specialist, ORT)
DBC's [1]
 ORT 05-04-15 21 1701
Verrichtingen [Vandaag]
Actieve diagnoses
 01-2015 coxartrose -

Aandachtspunten
Behandelbeperking
Isolatie-indicatie
Allergieën

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

Patiëntselectie
 Recent
 Polikliniek
 Kliniek
 OK
 SEH
 Eigen lijsten
 Zoeken
 Overzichten
 Todo
 Rapportages

Relevante voorgeschiedenis
Overige voorgeschiedenis...

Actuele medicatie
 PARACETAMOL TABLET 500MG (ORAAL), Zo nodig 4 x per dag 1000 milligram
 HYDROCHLOORTHIAZIDE TABLET 12,5MG (ORAAL), 1 x per dag 12,5 milligram
 PIRITRAMIDE INJVLST 10MG/ML AMP 2ML (INTRAVENEUS), volgens schema volgens pca-b protocol
 PARACETAMOL TABLET 500MG (ORAAL), 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 TRAAAT CAPSULE MGA 60MG (ORAAL), 1 x

Eerdere orthopedische operaties
 Eerdere operaties :
 21-04-2015: Heup - Totale Heupprothese Zonder Cement - Rechts
Actuele status PROM

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: 22-04-2015 Arts: RNL Nelis, R.
 Codelijst: ORT Complicaties
 Complicaties: Diepe wondinfectie heup
 Ernst: herstel na (re)operatie (chirurgische interventie op OK)
 Obductie:
 Abstineren:
 Doodsoorzaak:
 Gerelateerd aan: Operaties Uitgevoerd: 21-04-2015 08:00:00 HEUP - TOTALE HEUPPROTHESE ZONDER CEMENT - RECHTS/Materiaalcode TOTALE HEUP
 Opmerking: Only for testing purposes van Oosterhout
 Complicatiebespreking? Geacc.

Assen info

As	Ascode	Ascode omschrijving
As 1 Pathologie	1.01	Infectie/ontsteking
As 2a Lichaamsdelen	2a.04.01	bovenbeen
As 2b Orgaansystemen en organen	2b.99	Algemeen of orgaan(systeem) niet nader gespecificeerd
As 2c Algemene systemen en weefseltyping	2c.99	niet gespecificeerd
As 2d Lichaamsoppervlakken		
As 3 Externe factoren en overige kenmerken	3.01.01.09	operatiewond, niet nader gespecificeerd
As 3b Externe factoren Hulpmiddelen en Medicatie		

+ Uitgebreid
 Overige acties
 X Sluiten

Detail
 OK OK + Nieuw Annuleren



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