



Utilization of Nursing Classification Systems for the Depiction of the Nursing Process in Electronic Patient Records in Order to Improve Evidence-Based Nursing

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Monika Linhart, RN, PhD
Sebastian Kraus, RN, BA, cand. M.Sc.
Pia Wieteck, RN, PhD



Aims of utilization nursing process data in electronic health/patient records

Monika Linhart, RN, PhD

- EHR/EPR – What is it?
- EHR/EPR – Advantages in general
- EHR/EPR – Why should nurses use it too?
- Aims of using controlled nursing language for the nursing process documentation in EHR/EPR



EHR/EPR – What is it?

The Electronic Health Record (EHR) is a longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting.

Included in this information are patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports.

The EHR automates and streamlines the clinician's workflow.

(HealthIT.gov, 2014)



EHR/EPR – Advantages in general

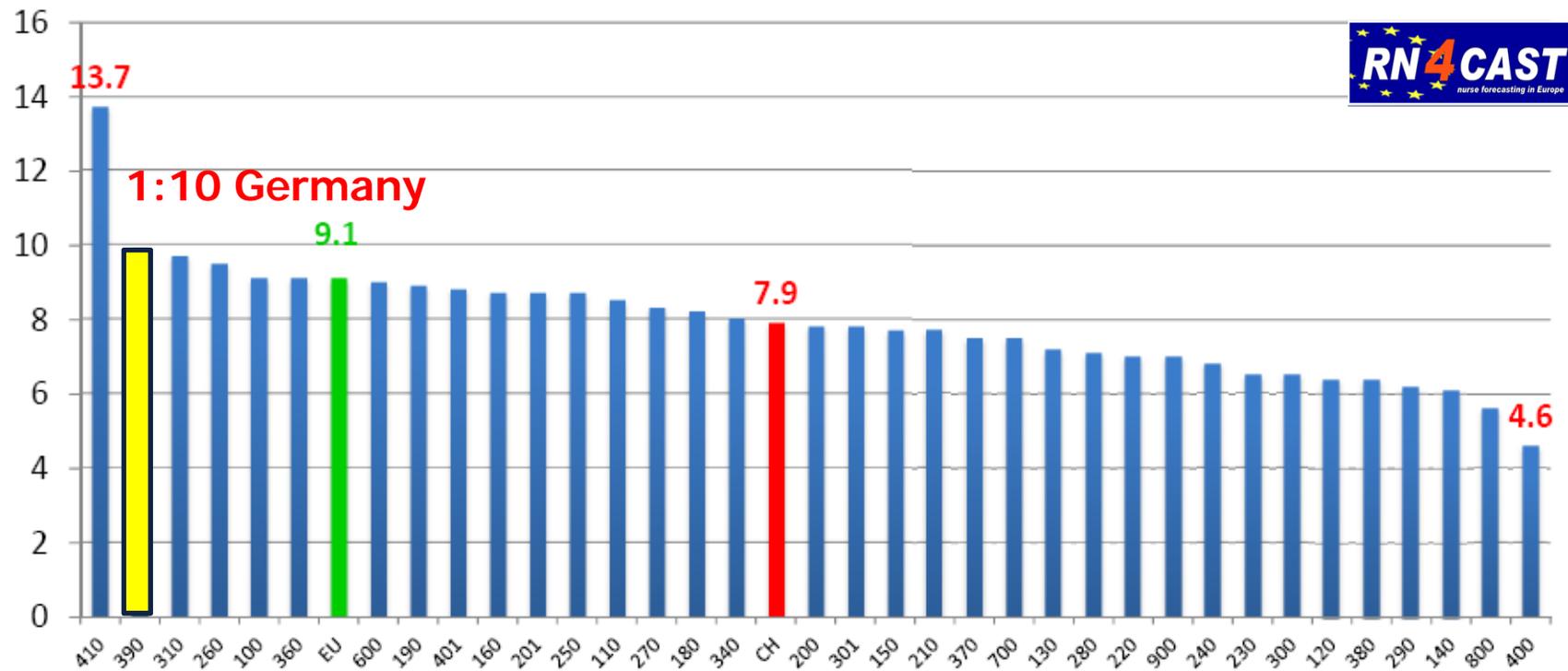
Widespread adoption and meaningful use of health information technology (HIT), electronic health records (EHR) in particular, will play a pivotal role in enabling transformative changes in the US [and other countries] healthcare system in order to achieve broader quality improvement and cost containment goals.

(Blumenthal & Tavenner, 2010)

Quality improvement and cost containment?

- Approximately 50,000 full-time nursing positions have been eliminated in the hospitals of Germany since 1996
(Isfort, 2010)
- The work condenses thereby losing its quality...
(Bartholomeyczik, 2007)
- The nursing staff performance-burden indicator has increased dramatically in recent years by about 25%
(Isfort, 2010)

Patient – Nursing staff relation





EHR/EPR – Why should nurses use it too?

If the proportion of nursing in the products of a hospital are not adequately demonstrated both on the cost and on the proceed side, the incentive for hospitals might be to go straight here for savings, regardless of the consequences ...

(Bartholomeyczik, 2007)

EHR/EPR = Solution?

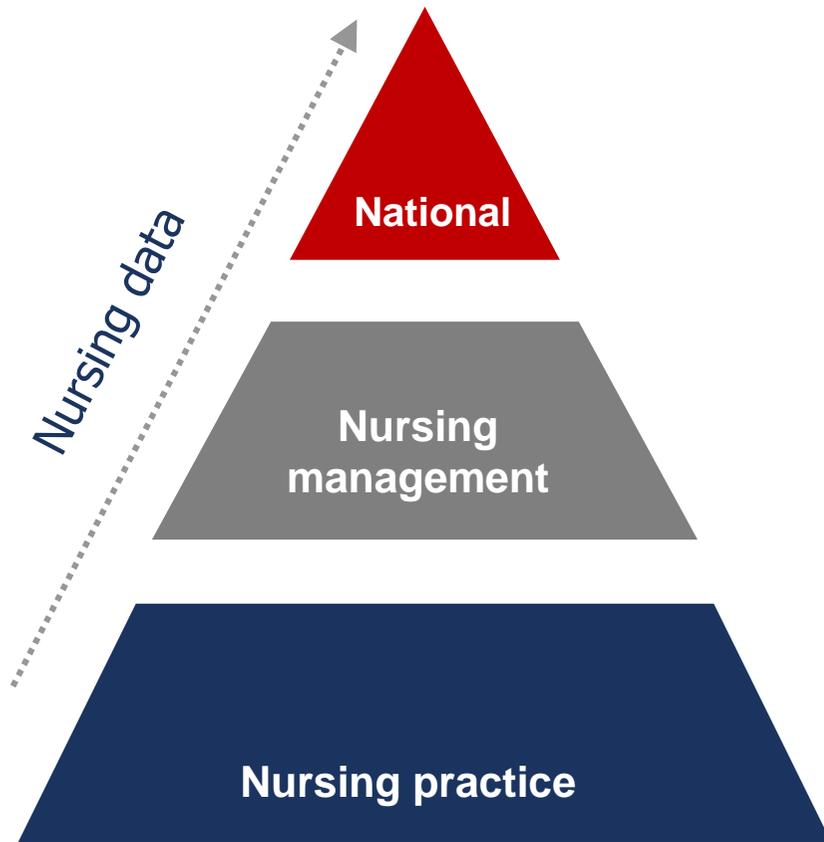


EHR/EPR – Why should nurses use it too?

A number of studies have demonstrated the benefits nurses receive when electronic health record (EHR) systems are put in place by hospitals.

Generally, such systems improve

- nursing documentation
- work coordination
- patient safety
- reduce medication errors
- and make nurses feel more satisfied with their work environments (Kutney-Lee & Kelly, 2011)



- Basis for policy decisions
 - Shifts in the performance spectrum
 - Support/funding of Outcome research and EBN
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- Just and reasonable personal management
 - Data for risk management
 - Data for quality management and marketing
 - Data für outcome measure
-
- Simplified and more correct nursing documentation
 - Support for decision-making
 - Systematic documentation of patient status over time
 - Support of process, information and communication flow

- 1 Support for decision-making
- 2 Meaningful supportive links between data entry and nursing classification
- 3 Proposition of literature-based interventions relevant to nursing diagnosis
- 4 Plausible references
- 5 Support of the ability to locate nursing diagnosis by indexing



EHR/EPR – Requests and aims for nursing practice

- 6 Utilization of the data for quality management
- 7 Automated patient transition report from the file
- 8 Support of case-based evaluation and outcome measurement
- 9 Departmental filter functions

- 1 Quality indicators (e.g. pressure ulcer, falls ...)
- 2 Quality evaluation through benchmark and quality parameters
- 3 Data for the evaluation of personal utilization
- 4 Data for the calculation of case costs/revenue statistics
- 5 Support of risk management reporting systems
- 6 Promoting the quality of documentation
- 7 Increasing efficiency in documentation
- 8 Optimization of the caring and treatment process through systematic data usage

EHR/ENP  Nursing process



Controlled vocabulary

System of terms, involving, e.g., definitions, hierarchical structure, and cross-references, that is used to index and retrieve a body of literature in a bibliographic, factual, or other database. (NICHSR, 2008)



Next question – Implementation?

EHR/ENP ↔ Nursing process



Nursing classification system

- Personal hygiene/clothing
 - Self-care deficit **washing**
 - The resident-- is unable to wash independently due to **restricted mobility**
 - The resident-- is unable to carry out personal hygiene independently due to a **hemiplegia/hemiparesis**
 - The resident-- is unable to carry out personal hygiene independently due to **physical restrictions in coping with stress**
 - The resident-- is not allowed to exert himself whilst carrying out **personal hygiene** due to a **reduced cardiac output**, there is a **self-care deficit**
 - The resident-- is **unable to hold bathing utensils for carrying out personal hygiene** due to a **restricted mobility**, a personal hygiene self-care deficit exists
 - The resident-- is unable to organise **personal hygiene independently** due to being **disorientated**
 - The resident-- should avoid movement between the pelvis and torso due to an **injury of the spinal column**, there is a **personal hygiene self-care deficit**
 - The resident-- is **completely dependent on personal hygiene** being carried out due to a **measurable altered consciousness**
 - Der Bewohner-- führt die **Körperwaschung** aufgrund einer **Selbstvernachlässigung** (Self-neglect) nicht adäquat durch
 - The resident-- is unable to **carry out perineal hygiene as accustomed** due to a **wound in the genital area**
 - The resident-- is **unable to carry out personal hygiene self-care independently due to stage of development**
 - The resident-- is unable to wash him/herself independently due to a **sensory integration disorder**
 - The resident's-- **personal hygiene is impaired** [nursing problem without specification]
 - The resident-- is **unable to shower/bathe independently**
 - + Self-care deficit oral hygiene
 - + Self-care deficit hair care
 - + Self-care deficit **dressing**
- + Respiration
- + Nutrition
- + Elimination

Nursing diagnoses	Nursing objectives	Nursing interventions
<p>The resident-- is unable to carry out personal hygiene independently due to a hemiplegia/hemiparesis</p> 	<ul style="list-style-type: none"> * Participation during personal hygiene is planned in the nursing care plan according to physical capabilities * Paralyzed extremity(ies) is/are integrated in pattern of action during body hygiene * Body awareness is activated and stimulated * Feels the own centre of the body * Is aware of spasticity reducing movement patterns and is able to use them * Gradual take-over of body hygiene in agreed upon intervals * Motor skills and physiological movement routines are encouraged * Is able to sit without lateral or supine support and to hold the balance * Muscle tone is regulated in sequences of movements in every day life * Improvement and promotion of the perceptual organisation * Is able to go/leave to washroom facilities * Accepts whole body wash by a nurse/primary carer * Feels actual physical well-being after nursing activity * Is able to wash and dry body independently 	<ul style="list-style-type: none"> * Determine resources and restrictions systematically * Include affected body regions during body hygiene purposefully * Carry out basal stimulating body wash according to Bobath * Carry out personal hygiene according to the NDT (Neuro-Developmental Treatment) * Promote/train every day competences in body hygiene (in hemiplegia) * Carry out personal hygiene according to the rehabilitative/other concept * Carry out tactual interaction therapy during body hygiene * Support finding/leaving washroom facilities * Wash whole body * Wash parts of the body * Prepare basin and personal hygiene articles for washing



Example for a potential solution

Nursing diagnoses

Resources

Nursing objectives

Nursing interventions

Personal hygiene/clothing

The resident- is unable to carry out personal hygiene independently due to a **hemiplegia/hemiparesis**

Characteristics/Symptom:

Is unable to wash him/herself
Is unable to wash certain body parts
Ignores the affected side
Level 3: Moderate impairment in personal hygiene

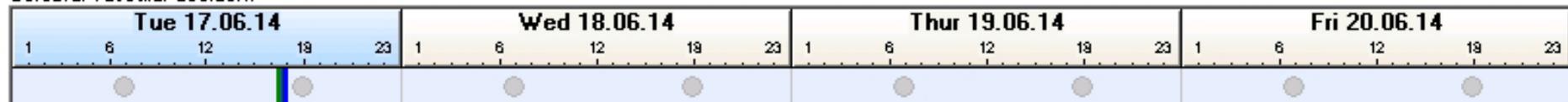
Causes/etiologies

Cerebral vascular accident

Is willing to carry out personal hygiene independently
Is motivated to learn new movement patterns
Assesses own self-care skills realistically
Shows perseverance to acquire new skills

Body awareness is activated and stimulated
Participation during personal hygiene is planned in the nursing care plan according to physical capabilities

Include affected body regions during body hygiene purposefully
0 minutes
Number of persons 1
2x daily
In the morning In the evening



The resident- is **restricted in carrying out oral hygiene** independently

Characteristics/Symptom:

Is unable to use utensils required for dental/oral/denture hygiene
Is unable to rinse mouth independently
Level 2: Low impairment in mouth/tooth care

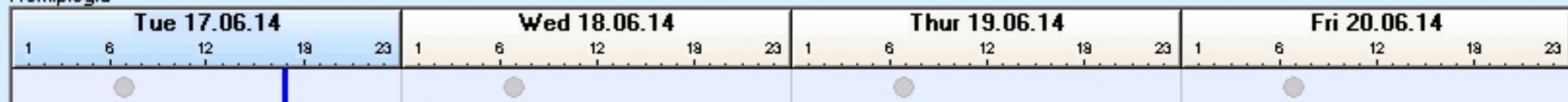
Causes/etiologies

Hemiplegia

Is able to carry out oral hygiene with guidance and support
Willingness to learn something new

Daily **dental hygiene is ensured**
Oral mucosa is healthy

Carry out assessment of mouth/tooth status
10 min.
1x daily
In the morning



Thank you for your attention

