European Nursing care Pathways
## Giving Nursing a Language

ENP

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- Objectives
- Development
- Organising principle and structure
- Systematic further development
- Evidence base

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Nursing classification and organization system

- **A classification is an organisational system based on the principle of class formation.** A classification structure is a listing of terms or concepts represented in a **hierarchical structure**.

- The sorting of different **nursing phenomena or concepts** in groups, classes, categories (resulting from the organisation according to criteria and types of features), can be called a **nursing classification**.

Reference: HIMSS 2006

A major challenge:
(Dis)Orientation within the nursing process
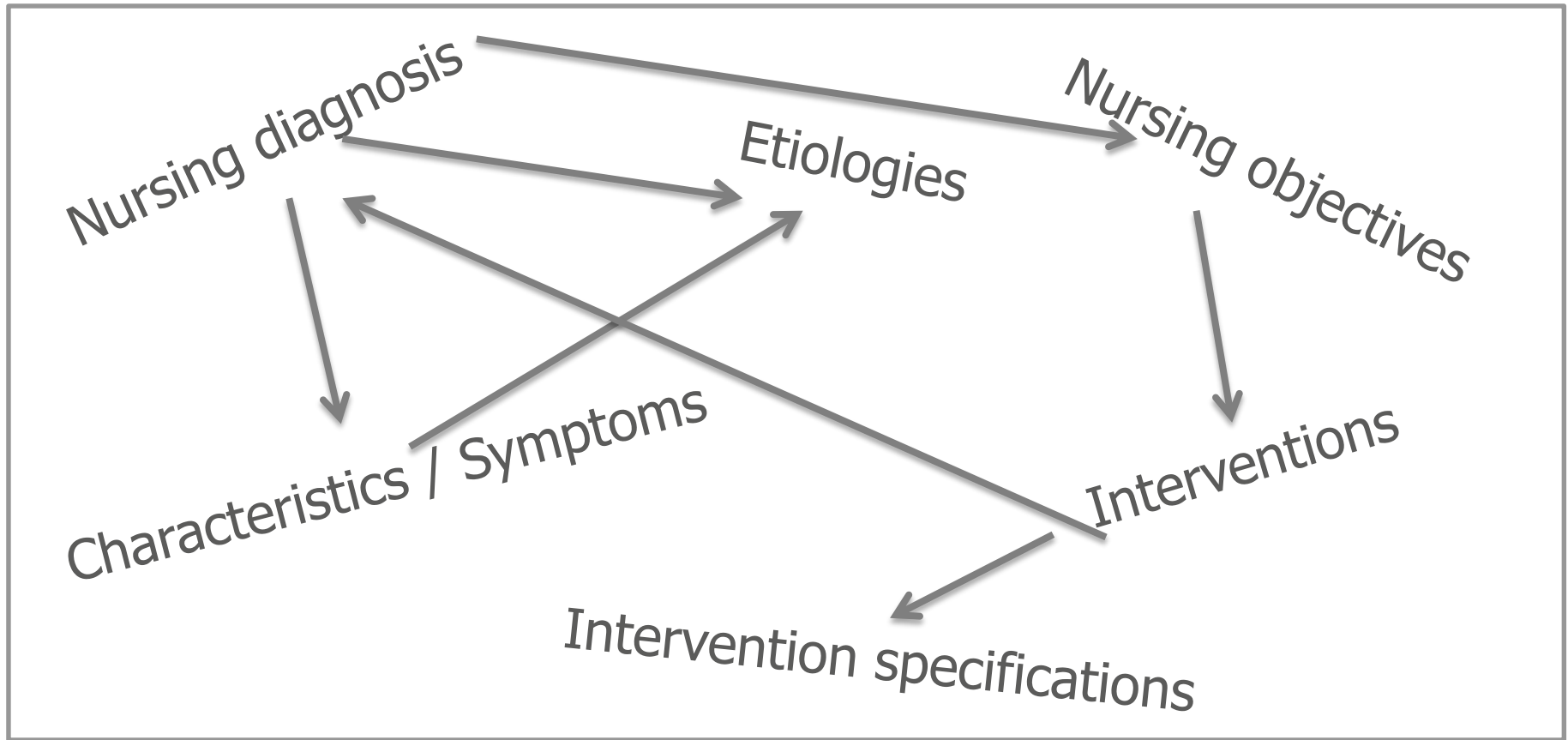
Structured illustration of the nursing process in the context of documentation in a standardized professional language

- Support of the communication process

- Support of processes and transitional care

- Support of performance transparency in nursing

- Structuring of the current nursing knowledge

- Support of quality development, nursing staff calculation and outcome measurement

References: Figosky & Downey 2006, Bartholomeyczik 2000, Bates et al. 2003, Titler et al. 2005, Gordon 2001, Gordon 2010, Johnson 2006

- **1989: Beginning of the inductive development**
  - "Nursing performance can be **practically** illustrated with a standardized terminology."

- **1994: First publication of the catalogue**
  - Containing nursing problems, outcomes and interventions

- **1996: Representation of the ENP catalogue in IT**

- **1998: Establishment of a research department**
  - Continuous further development in projects with end users and through literature analyses

- **from 2000: evidence-based development**
  - (validation studies, cross-mapping, systematic reviews, ...)

Division into **three** sections

- ENP… as a **nursing classification system** for a total of seven groups
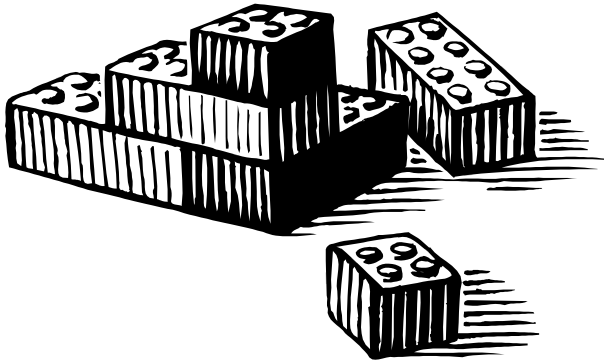

- ENP… as **pre-combination** of the elements of this nursing classification system

- ENP… as **practice guidelines** developed from the pre-combination

Pictures: www.istockphoto.com

Seven groups: components

- Nursing problems / phenomena

- Characteristics

- Etiologies

- Resources

- Nursing objectives

- Interventions

- Intervention specifications

Nursing problem (P) + **Etiologies**

Impaired verbal communication

Motor aphasia
(Broca's aphasia)

or

Characteristics/ Symptoms

Picture: P. Vaclavek (www.fotolia.com)

ENP Nursing diagnosis

The patient is impaired in **verbal communication** due to **motor aphasia** (Broca's aphasia)

Individual	Nursing problem / phenomenon

The patient is impaired in verbal communication due to motor aphasia (Broca's aphasia)

Specification (here: etiology)
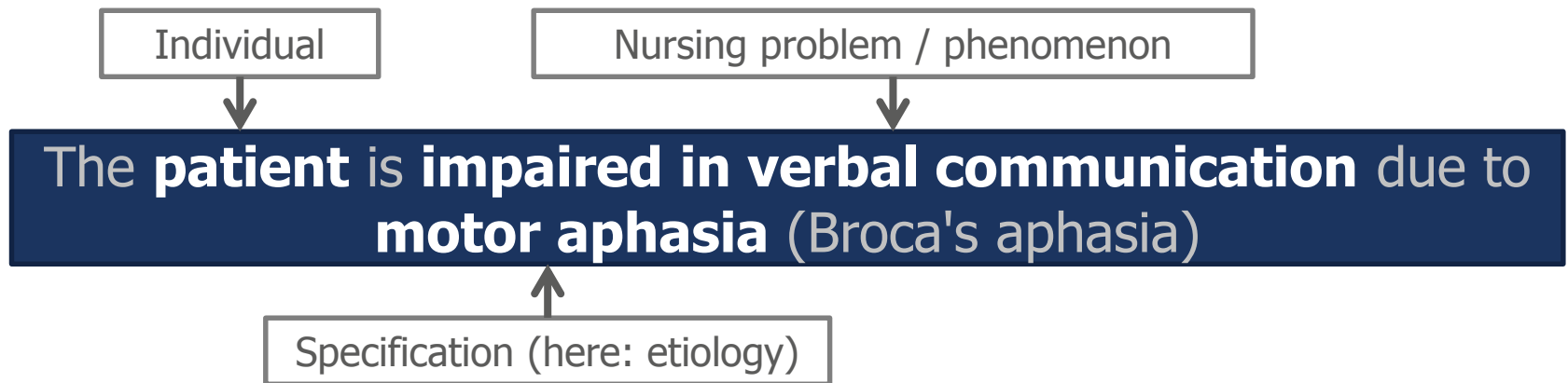
Characteristics/Symptoms

- Strongly pronounced agrammatism
- Strongly halting speech flow
- Uses commonplace phrases
- Uses meaningless phrases and/or stereotypes
- …

Etiologies

Pathophysiologic causes
- Degenerative process of the brain
- Congenital vascular malformations
- …

Disease-related causes
- Cerebral vascular accident
- Encephalitis
- …

Nursing diagnoses → **Nursing objectives** → **Interventions**

Nursing diagnoses:
- Etiologies
- Characteristics/Symptoms
- Resources

Nursing objectives:
- Scales

Interventions:
- Detailed instructions
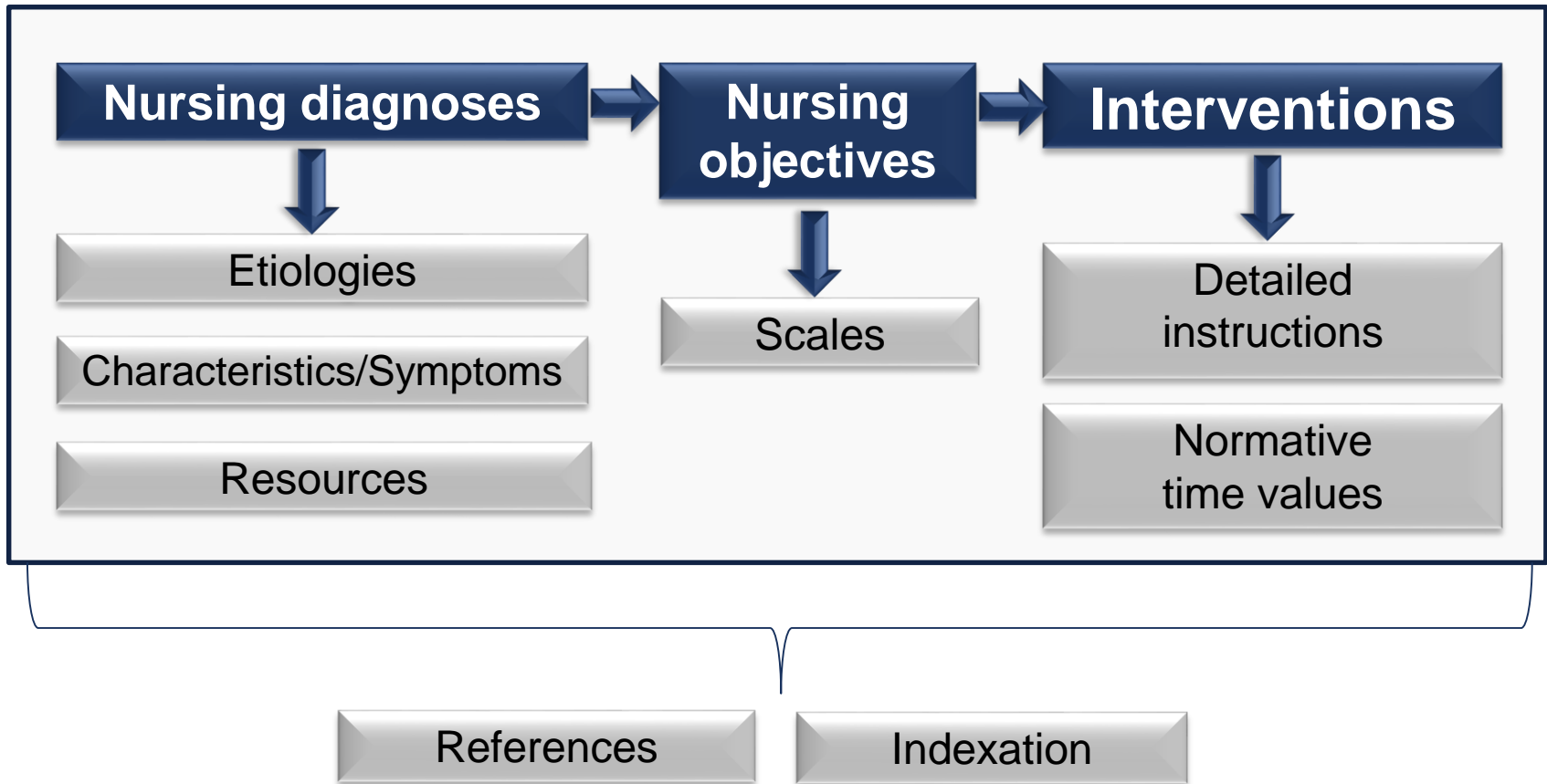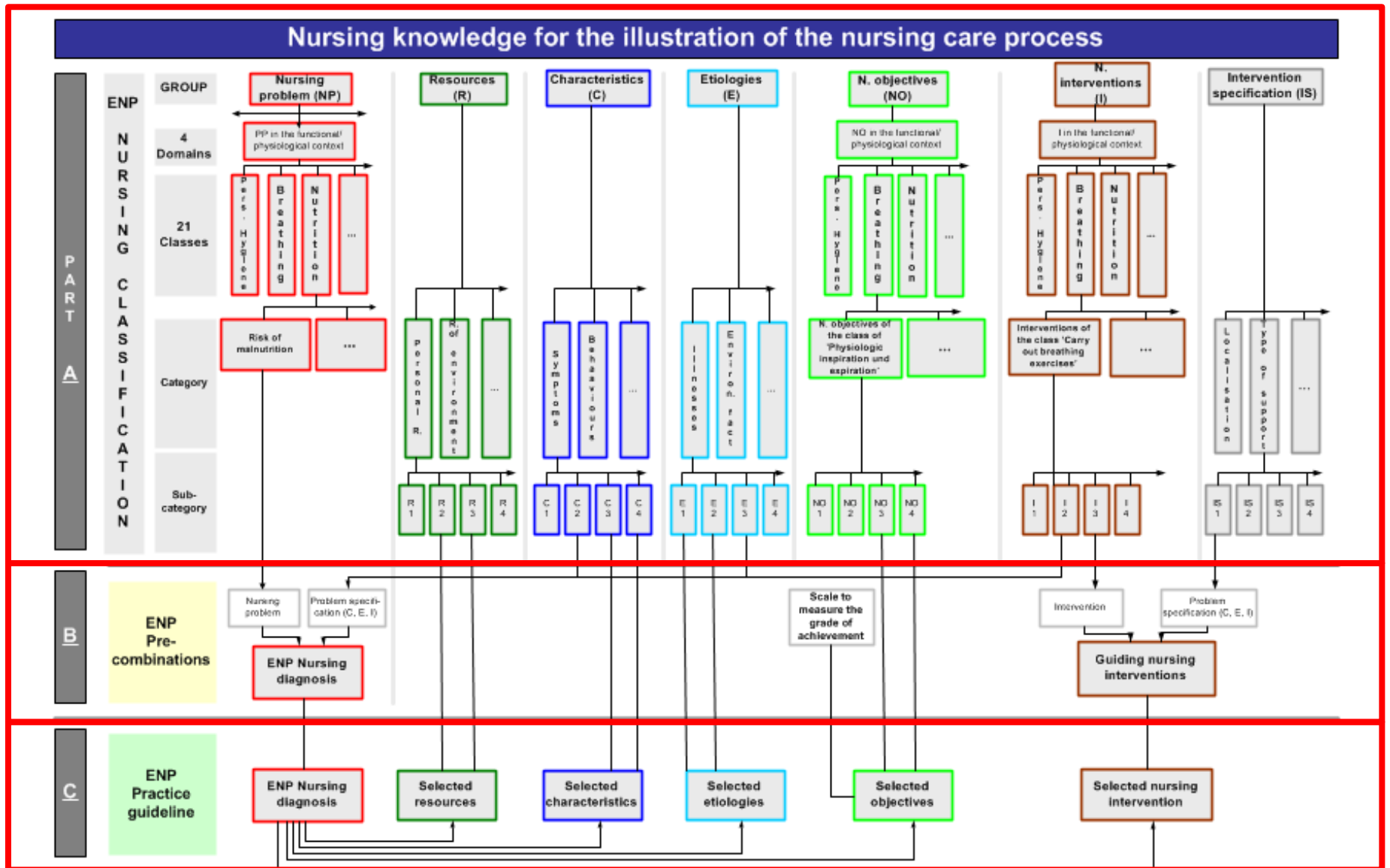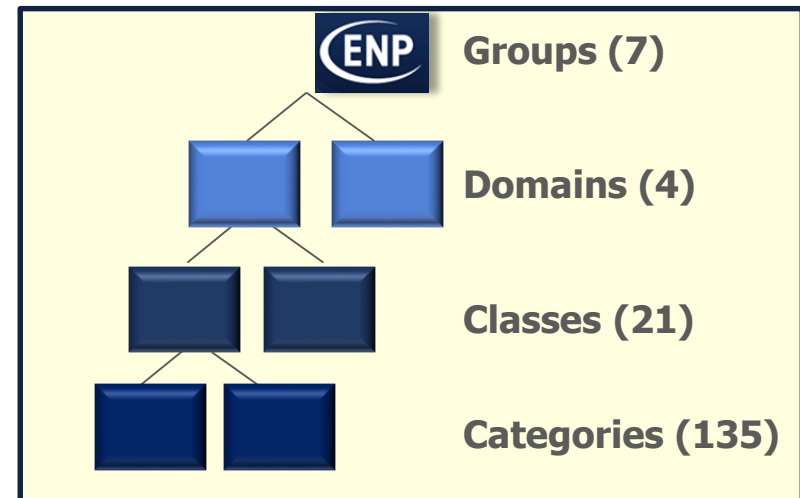- Normative time values

- References
- Indexation

Illustration of the nursing process in the form of a care pathway representing the current knowledge, individualized for each patient!

Nursing knowledge for the illustration of the nursing care process

- Topics are organized from general to specific

- On each hierarchy level a further distinguishing feature is added

- Concepts are assigned to exactly one generic term

Vehicle

Tricycle **Car** **Bicycle**

Station wagon **Convertible** **Limousine**

ENP

Groups (7)

Domains (4)

Classes (21)

Categories (135)
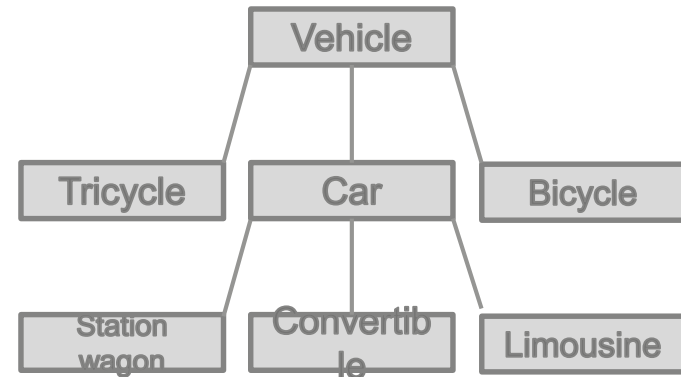
Group: Nursing problems / phenomena

Domain	Class	Category	Subcategory
Functional/ physiological area	Personal hygiene/clothing	Self-care deficit washing	
		Self-care deficit oral hygiene	
		Self-care deficit hair care	
		Self-care deficit dressing	
	Respiration	Ineffective self-cleansing function of the respiratory tract	
		Insufficient respiration	The patient has insufficient respiration due to dyspnoea
		Risk of respiration insufficiency	The patient is ventilated, there is a risk of insufficient respiration
		Risk of suffocation	The patient has serous foamy sputum associated with acute dyspnea, there is insufficient respiration
		Risk of aspiration	...
		Risk of atelectasis/pneumonia	
		Risk of impaired respiration postoperatively	

Current status: scope and evidence level of ENP

Terms/concepts of the group	Items v2.5	Items v2.6	Items v2.7	Items v2.9 (new)
Nursing diagnoses	521	542	548	**552**
Characteristics / Symptoms	2230	2719	2905	**3984**
Etiologies	1799	2282	2426	**3526**
Ressources	379	457	473	**648**
Nursing objectives	1435	1683	1724	**1852**
Nursing interventions	2494	2511	2558	**2615**
Intervention specifications	**3652**	**4285**	**4461**	**4797**

Each item has a unique and unchangeable ID number!

- Systematic literature-based revision of about 1/5 of all practice guidelines
- Growing number of ENP validation studies (completed and in progress):
  - Implementation and evaluation in nursing practice
  - Securing content and criteria validity
  - Cross-mapping, expert rating
  - Student theses

References: Baltzer et al. 2006, Kossaibati & Berthou 2006, Del Negro 2012, Berger 2010, Schmitt 2010, Wieteck 2008

Each systematically revised nursing diagnoses is supported by a definition:

> **The patient is impaired in verbal communication due to motor aphasia (Broca's aphasia)**
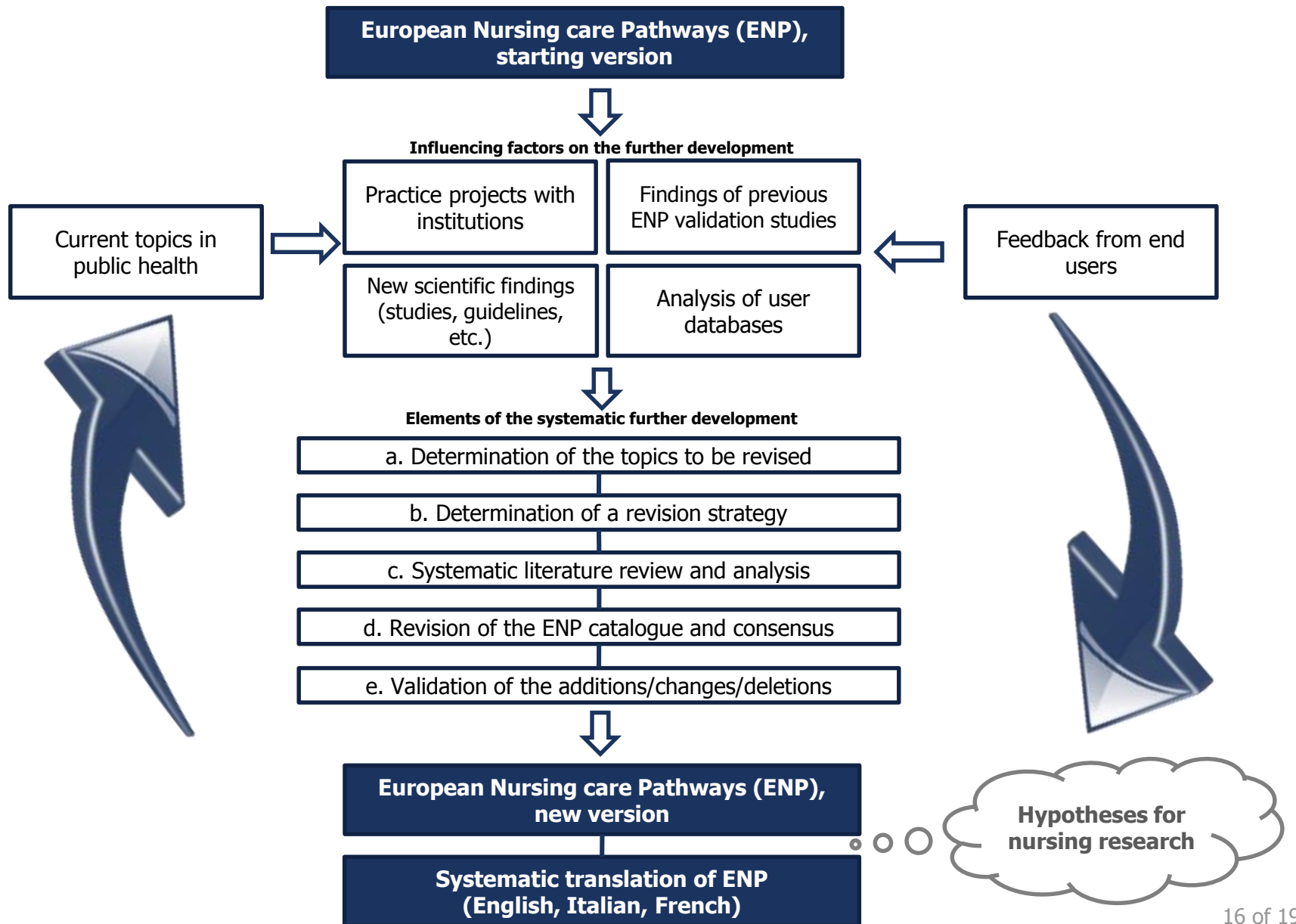>
> Impaired or lacking ability to actively participate in verbal communication after completion of language acquisition due to a central speech disorder with the lack of grammatical structures in the sentence structure as a leading symptom.
>
> (DGN 2012, Wehmeyer et al. 2006, ICNP Aphasia [10002438],
> ICF Communicating with - receiving - spoken messages [d310], ICF Speaking [d330])

The revision history and the level of evidence (based on NANDA-I) is shown for the respective ENP nursing diagnosis:

Revision history: 1991, 1994, 2004, 2008, 2014		
	ENP practice guideline	ENP nursing diagnosis
Level of evidence:	**LoE 3.2**	**LoE 3.2**

European Nursing care Pathways (ENP), starting version

Influencing factors on the further development

Current topics in public health

| Practice projects with institutions | Findings of previous ENP validation studies |
| New scientific findings (studies, guidelines, etc.) | Analysis of user databases |

Feedback from end users

Elements of the systematic further development

a. Determination of the topics to be revised

b. Determination of a revision strategy

c. Systematic literature review and analysis

d. Revision of the ENP catalogue and consensus

e. Validation of the additions/changes/deletions

European Nursing care Pathways (ENP), new version

Systematic translation of ENP (English, Italian, French)

Hypotheses for nursing research

- ENP can (and should) not replace the nurses expert knowledge

- ENP is not complete:
  - i.e about 23% of the NANDA-I nursing diagnoses can not be illustrated with ENP
  - About 18% of formulations in nursing care plans had to be added individually (2007)

- Currently, there are only a few validation studies which include a review of an **entire** practice guideline

- The operationalized scales for outcome measurement are partly not yet validated (e.g. own developments)

- ENP is not yet tested in some areas in practical use (e.g. recovery room, operating theatres, neonatal intensive care unit)

- Not all important questions for management, research and education can be answered from the data obtained with ENP

References: Wieteck 2007, Wieteck 2004, Berger 2010

What is next?

- Development of a new system to specify the levels of evidence (in cooperation with NANDA-I)

- Systematic revision of all nursing diagnoses and practice guidelines

- Supporting the international implementation and use of ENP

- Networking and exchange

- Establishment of strategies and concepts for analyzing the data generated with ENP

Thank you for your attention!

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