National monitoring of nursing activities
the Belgian experience

Bart Geurden, RN, MSc

University of Antwerp

Karel de Grote Hogeschool

Belgium

National Monitoring of nursing activities

1. Introduction

2. The concept "(N)MDS"

3. Belgian-NMDS version 1

Prof.Dr. Walter Sermeus

4. Development of B-NMDS version 2

5. Impact of NMDS; the future

1. Introduction

- Nurses are the main human resource in healthcare delivery

- Up to 20 % of nurses' time is spent to documenting the care they provide

- Internationally: *nursing is viewed as invisible (in the record of care)*

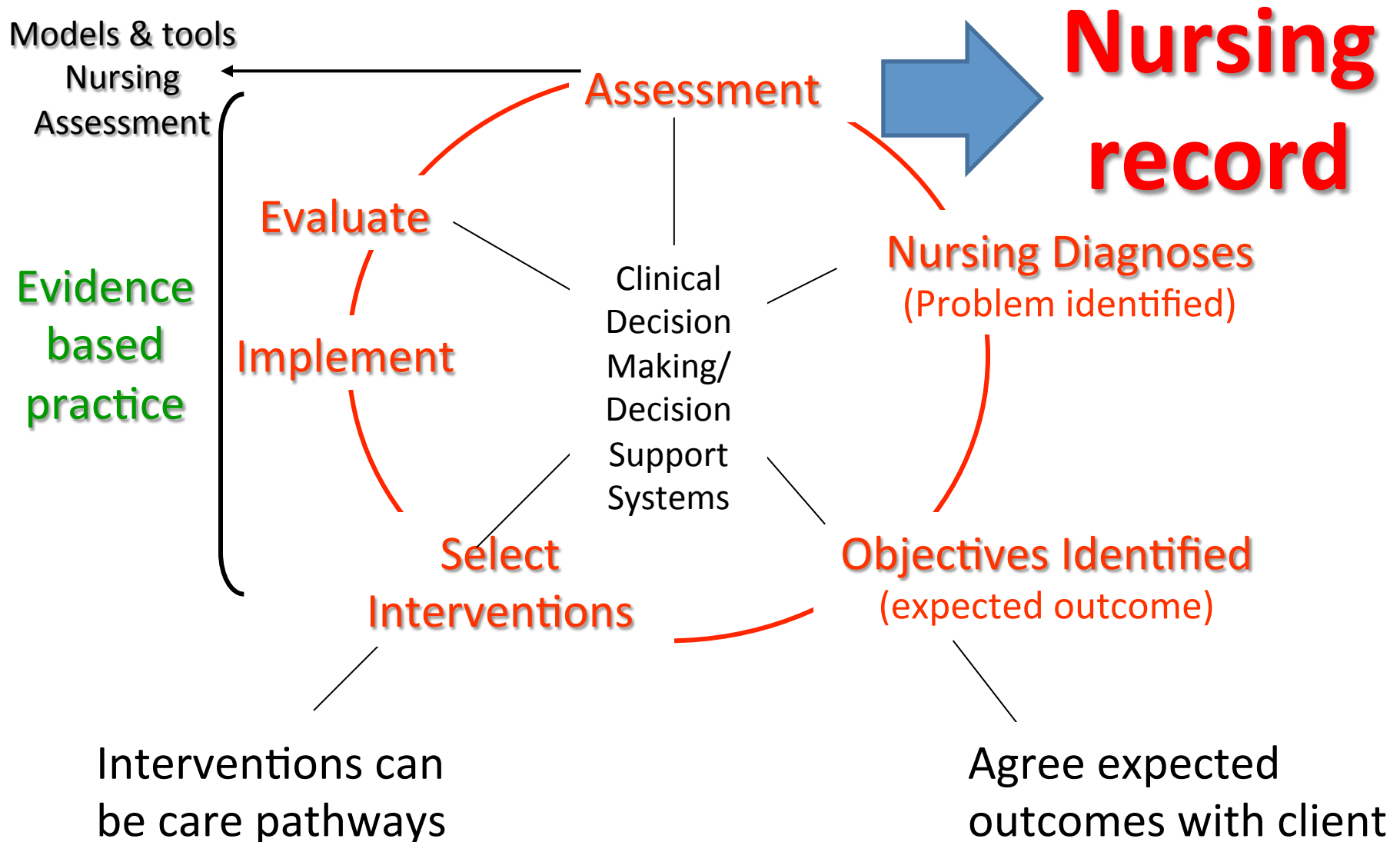(Goossen,1998; Clark, 1999; Manias & Street, 2001; Korst, 2003)
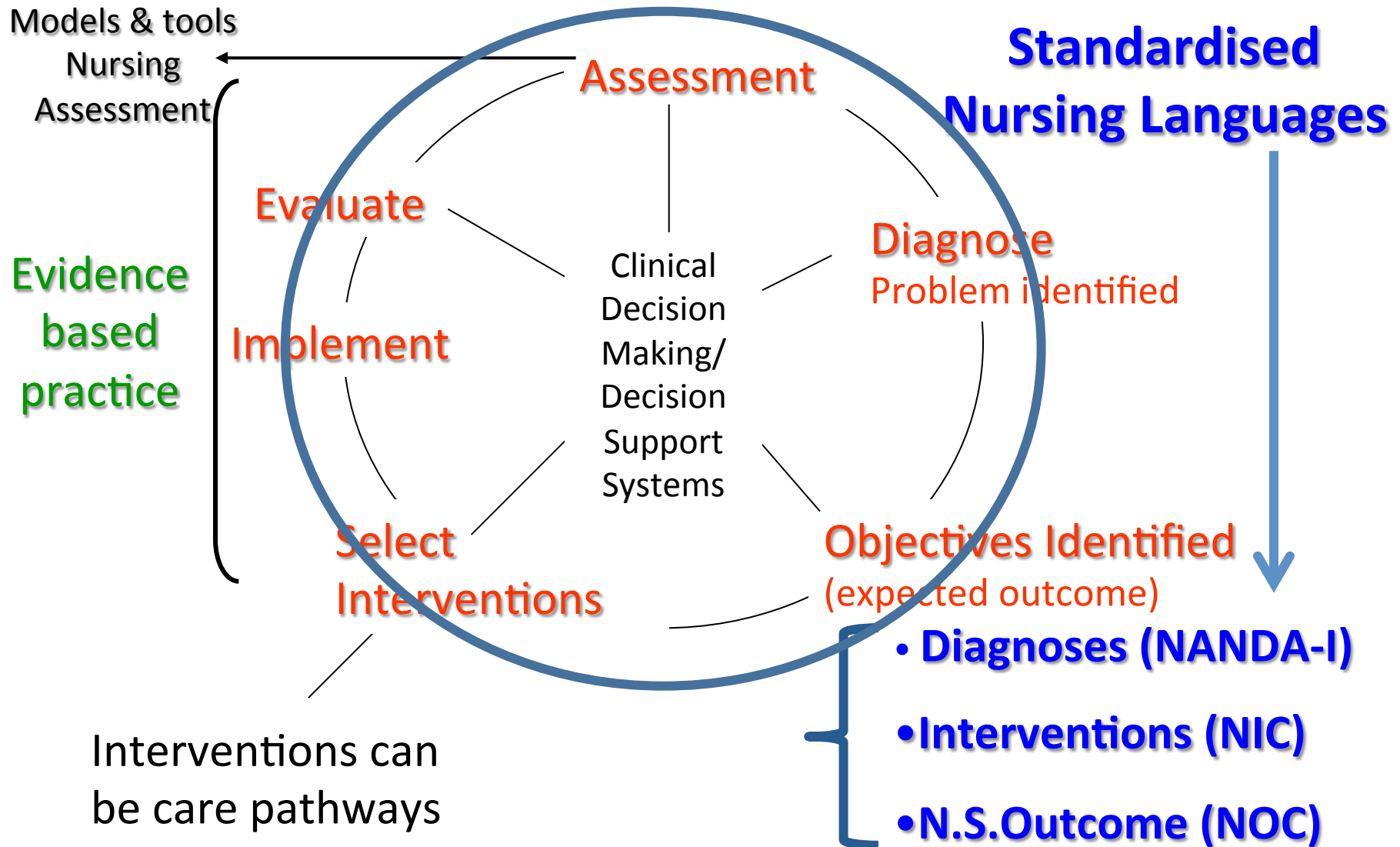
1. Introduction

- A key problem = nursing terminology:

"If we cannot name it, we cannot control it, finance it, research it, teach it, or put it into practice"

Clark & Lang, 1992

1. Introduction

Models & tools
Nursing
Assessment

Assessment

Nursing record

Evidence
based
practice

Evaluate

Implement

Clinical
Decision
Making/
Decision
Support
Systems

Nursing Diagnoses
(Problem identified)

Select
Interventions

Objectives Identified
(expected outcome)

Interventions can
be care pathways

Agree expected
outcomes with client

1. Introduction

Models & tools
Nursing
Assessment

Evidence
based
practice

**Standardised
Nursing Languages**

Assessment

Evaluate

Diagnose
Problem identified

Implement

Clinical
Decision
Making/
Decision
Support
Systems

Select
Interventions

Objectives Identified
(expected outcome)

Interventions can
be care pathways

- **Diagnoses (NANDA-I)**

- **Interventions (NIC)**
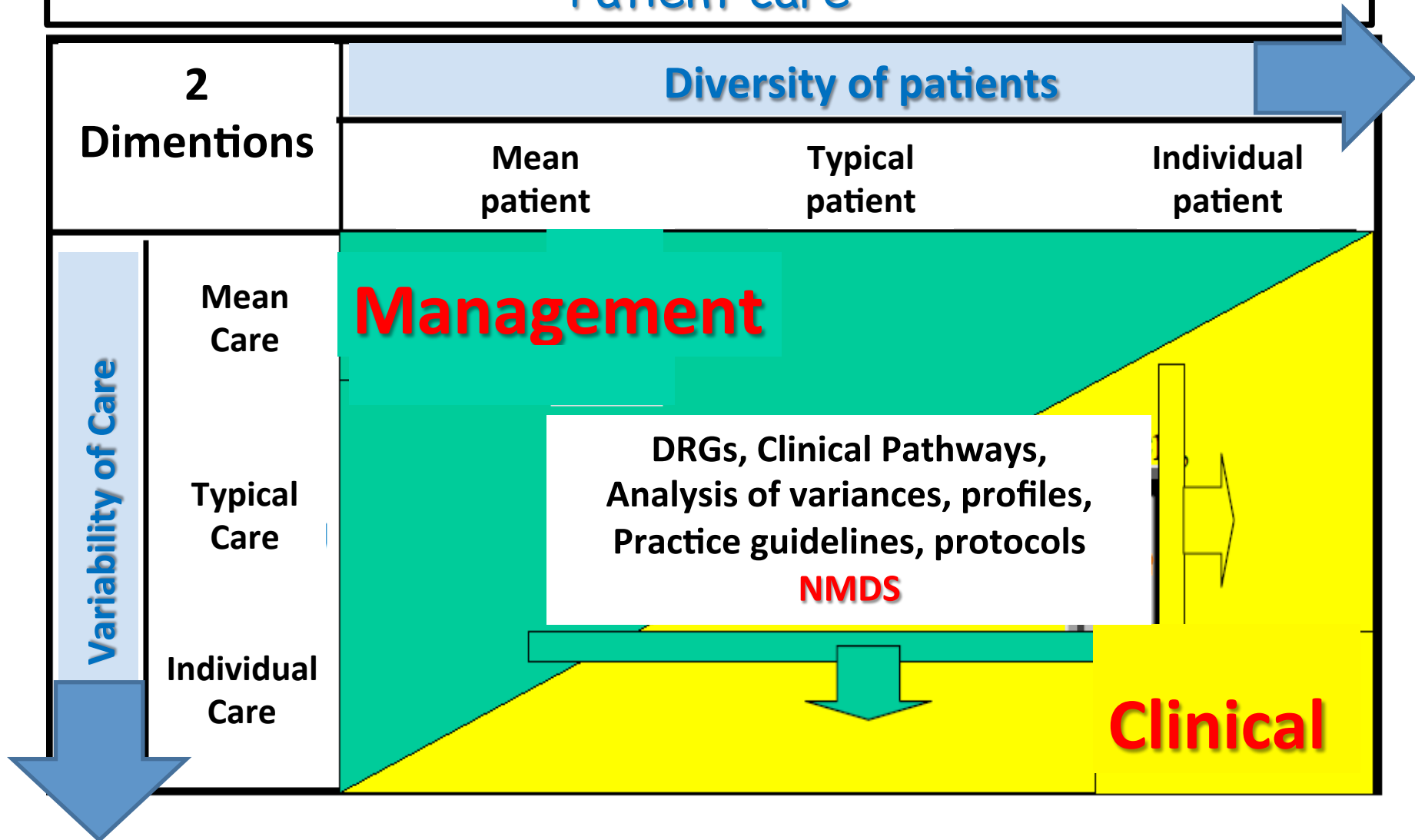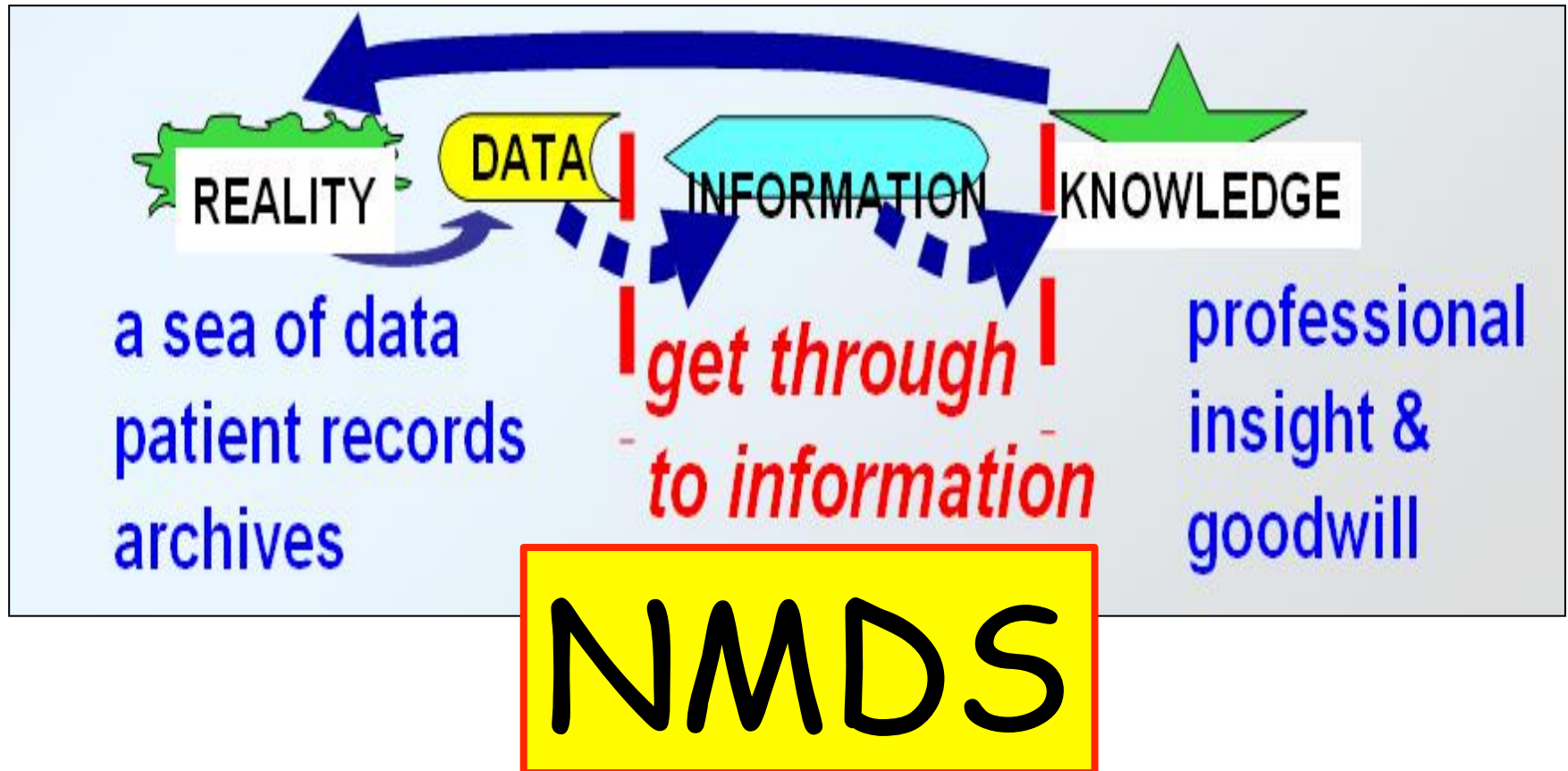
- **N.S.Outcome (NOC)**

1. Introduction

- 1980's: US → Financing health care based on "Diagnosis Related Groups" (DRGs)

- Belgian governement & hospital managers wanted to revise the financing of health care

- DRG system is tempting....

- <u>Nurses wanted to be more involved in the hospital management </u>(DRG = medical approach).

1. Introduction

Patient care

2 Dimentions	Diversity of patients		
	Mean patient	**Typical patient**	**Individual patient**
Mean Care	**Management**		
Typical Care		DRGs, Clinical Pathways, Analysis of variances, profiles, Practice guidelines, protocols **NMDS**	
Individual Care			**Clinical**

Variability of Care

2. Concept (N)MDS

REALITY → DATA → INFORMATION → KNOWLEDGE

a sea of data
patient records
archives

get through
to information

professional
insight &
goodwill

NMDS

2. Concept MDS

- The **Nursing Minimum Data Set** (NMDS) is a classification system which allows for the standardized *collection of essential nursing data*.

- The collected data are meant to provide an *accurate description of the nursing process* used when providing nursing care.

- The NMDS allow for the *analysis and comparison of nursing data* across populations, settings, geographic areas, and time.

2. Concept MDS

The validity of a NMDS is predicated on identifying

1. *'core'* elements of nursing practice, those which are used frequently by

2. the *majority of nurses*

3. *across care settings*, to yield a

'powerful but limited set of nursing data'

(Goossen 2002)

2. Concept MDS

Three stages in the development of a NMDS

1. Selection of data terms

2. Turning data into information

   Establishing te validity and reliability of data; devising a database for data storage and useful analysis

3. Application

   Use dataset in clinical, managerial, educational or quality evaluation applications

   (Sermeus, 2002)

2. Concept MDS

- The minimum dataset concept has been utilised in different areas of healthcare

- Sometimes on a multidisciplinary basis

- Example of a comprehensive suite of MDS application: see www.interrai.org

inter**RAI**™

Welcome | Who We Are | Instruments | Applications | Dona

**Speaking
the same
language for
high quality care**

| Getting Started
| interRAI Worldwide
| Bibliography
| Newsletter

News

Alzheime
Gene Dis
interRAI A
July 23, 20

Read mo

Bu

**interRAI is an international collaborative to improve
the quality of life of vulnerable persons through a
seamless comprehensive assessment system.**

Our consortium strives to promote evidence-informed clinical practice and policy
decision making through the collection and interpretation of high-quality data about
the characteristics and outcomes of persons served across a variety of health and
social services settings. Read More >>

2. Concept MDS

NMDS in other countries:

- US (1985) (Ryan and Delaney,1995)

- Australia (Turley, 1992)

- Finland (Turtiainen, 2000) adapted the B-NMDS to Finland

- Netherlands (Goossen, 2001)

2. Concept MDS

- International Nursing Minimum Data Set

i-NMDS

- Based on US-NMDS and Belgian-NMDS

- uses the International Classification for Nursing Practice (ICNP®)

- Australia, Thailand, Japan, Netherlands, Switzerland, Finland, Canada en Ireland

- Visit: **www.nursing.umn.edu/ICNP**

2. Concept i-NMDS supports:

- Describing client health status, nursing interventions, care outcomes, and resource consumption related to nursing services

- Improving the performance of health care systems and the nurses working within these systems worldwide

- Enhancing the capacity of nursing and midwifery services

- Addressing the nursing shortage, inadequate working conditions, uneven distribution and inappropriate utilization of nursing personnel

- Testing evidence-based practice improvements

3. Belgian-NMDS

- Main purpose of the Belgian-NMDS =

1. To improve *nursing performance conditions*
   (increase budget & better allocation of resources)

2. to increase the *effectiveness of nursing care*

3. Belgian-NMDS version 1

General

- Compulsory by law since 1988
- All Belgian acute Hospitals (n=141)
- Sample: 15 days / 4 months
  - (first half of March, June, Sept, Dec = 60 days/year)
- Governement chooses at random 5 days out of each month (incl. 1 weekend day) =

  reference database
- >20 Million nursing records since 1988
- Largest Nursing Dataset in the world

3. Belgian-NMDS version 1

Content

- General information about hospital

- Patient demographics:
  - Age; gender; date of admission and discharge from hospital; hour of admission and discharge from nursing unit

- Nurse staffing data per ward:
  - number FTE; number of hours worked/nurse; qualification; number of beds in ward

3. Belgian-NMDS version 1

23 nursing interventions:

1. Care in relation to hygiene (degree of help: 4 categories)
2. Care in relation to mobility (degree of help: 4 categories)
3. Care in relation to excretion (degree of help: 4 categories)
4. Care in relation to nutrition (degree of help: 4 categories)
5. Tube feeding
6. Oral care
7. Prevention of pressure ulcers (by alternating positions)
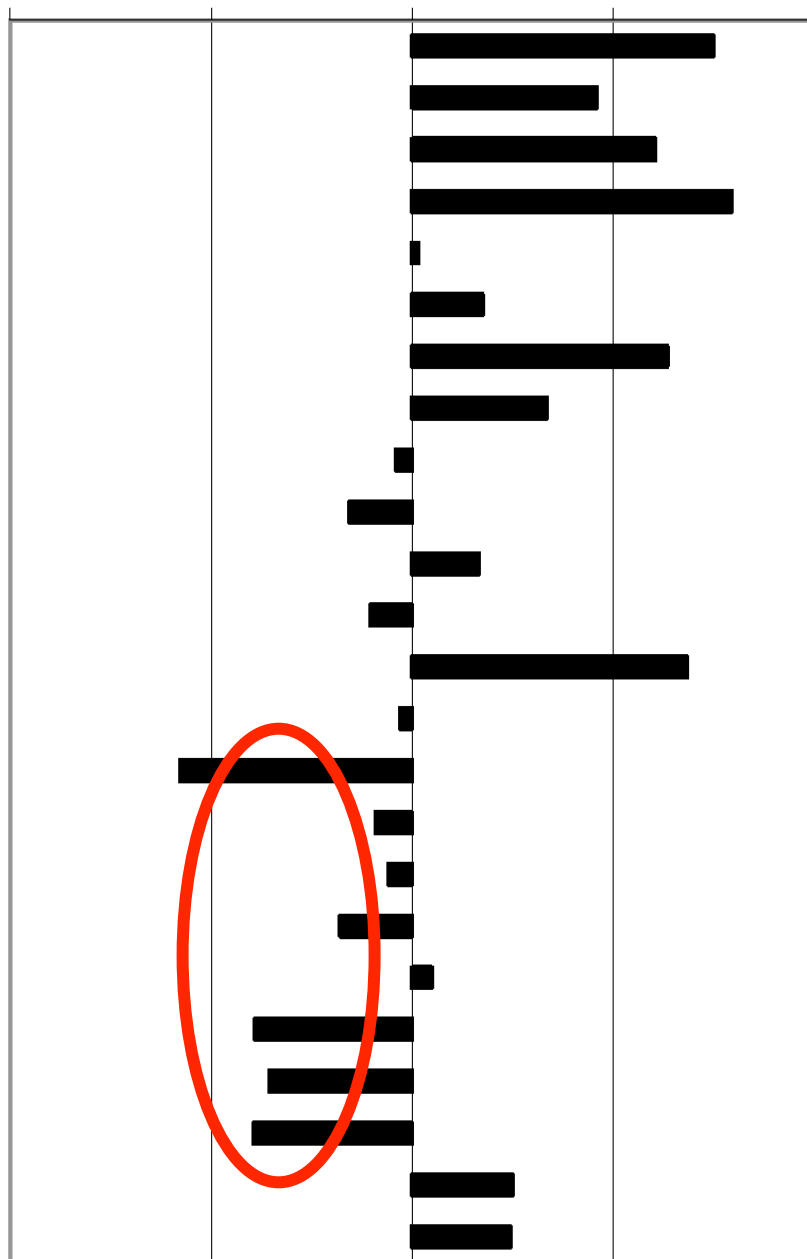8. Help with clothing (daywear)

3. Belgian-NMDS version 1

23 nursing interventions:

9. Care of endotracheal canule or ETube

10. Nursing anamnesis

11. Selfcare training (occasionally or programme)

12. Care of emotional problems

13. Care of desoriented patient (protective measures)

14. Isolation measures to prevent contamination

15. Registration vital parameters (most frequent parameter)

16. Registration fysical parameters (most frequent parameter)

3. Belgian-NMDS version 1

23 nursing interventions:

17. Supervision traction, plaster, external fixator

18. Blood samples (number/24h)

19. Medication (IM,SC,ID) (number/24h)

20. Medication IV (number/24h)

21. Supervision IV-infusion (number of lines)

22. Woundcare (surgical wound)

23a. Size of traumatic wound (4 categories)

23b. Woundcare of traumatic wounds (times/24h)