

The structure of Medical Education in Europe:

*Implementing Bologna-
on the way to a
European success story?*



Workshop 2

Organization of medical examinations and quality assurance: best practice (best we can)

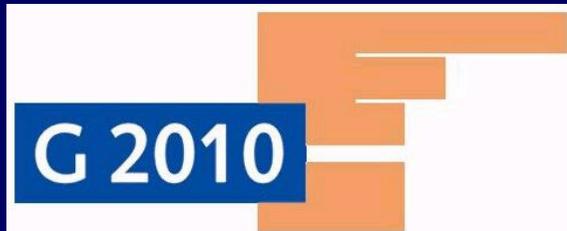
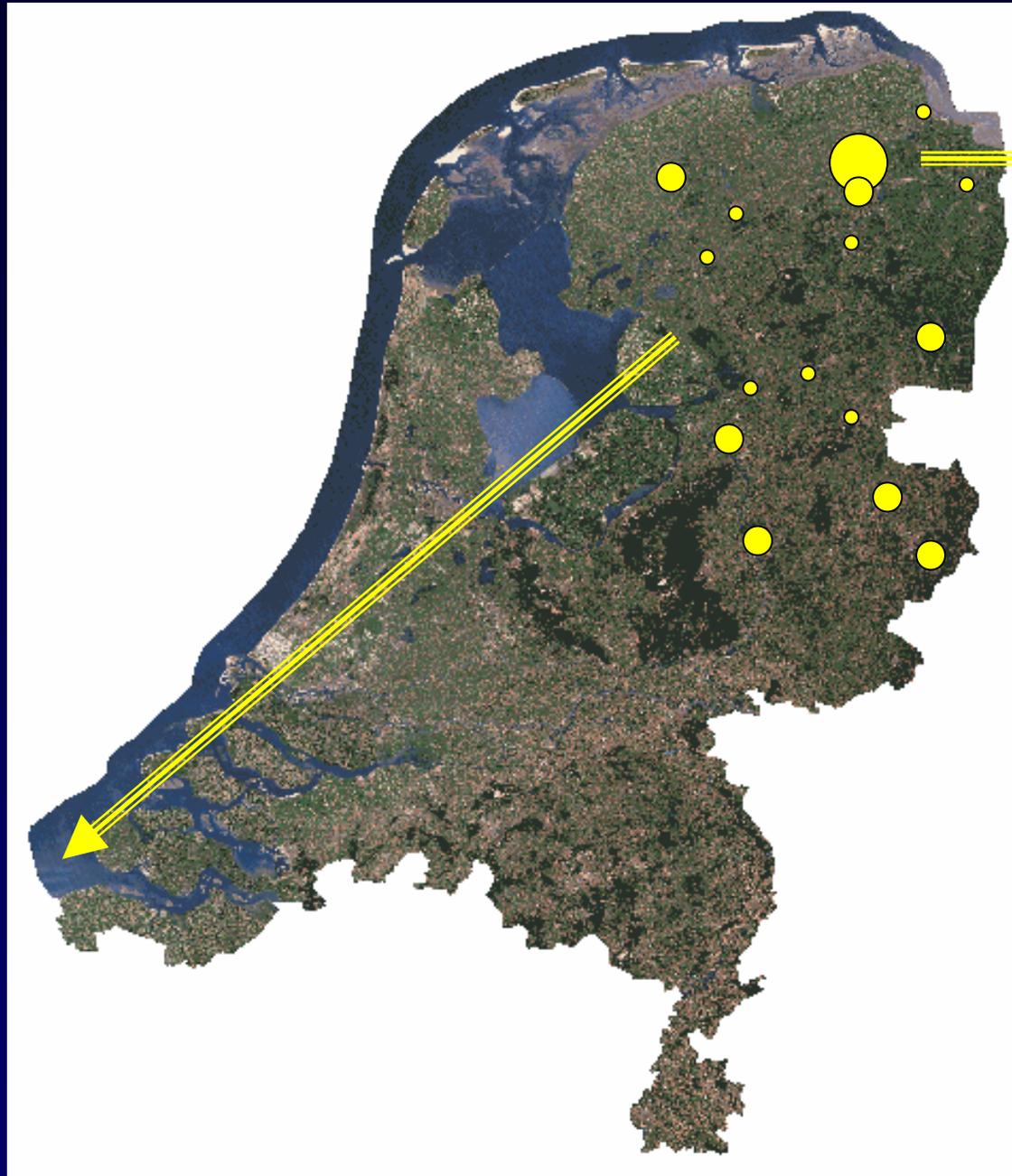
JBM Kuks, MD PhD,
Neurologist
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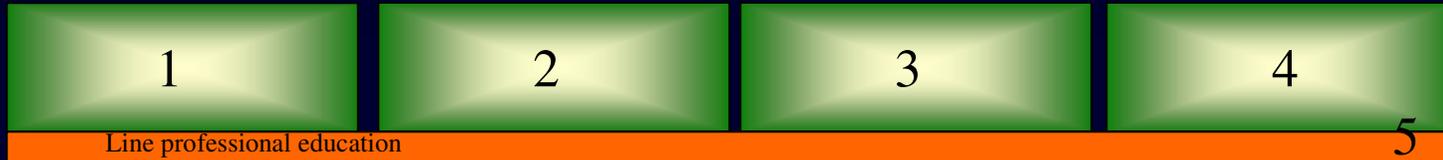
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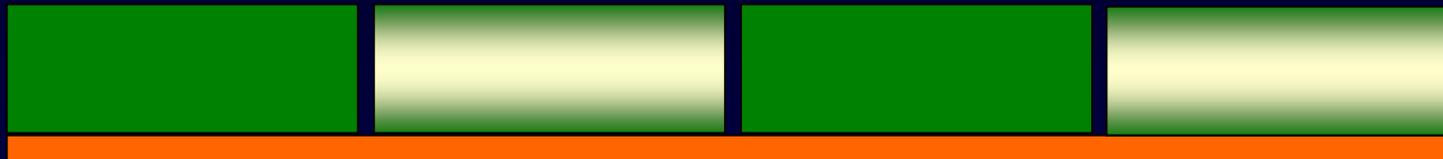


B1



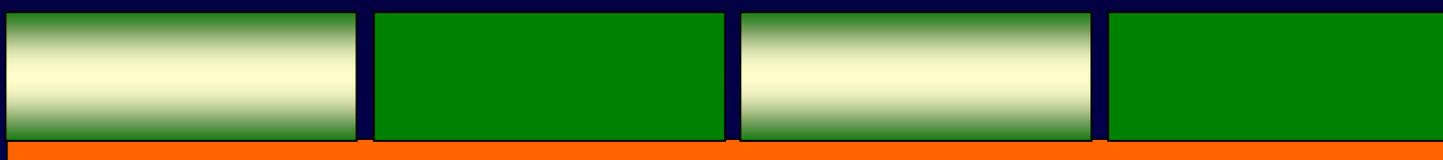
Theory

B2



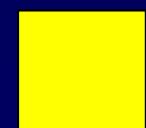
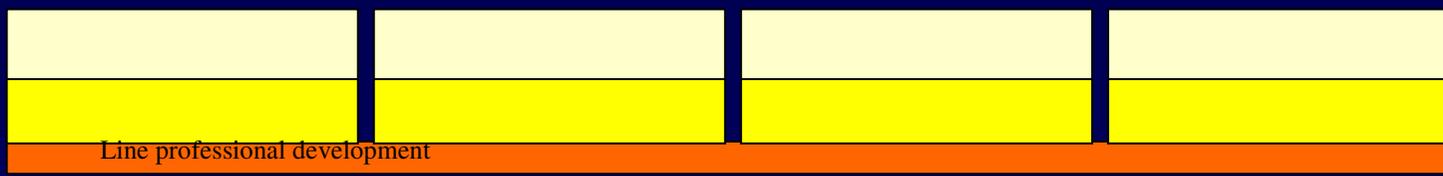
Training

B3



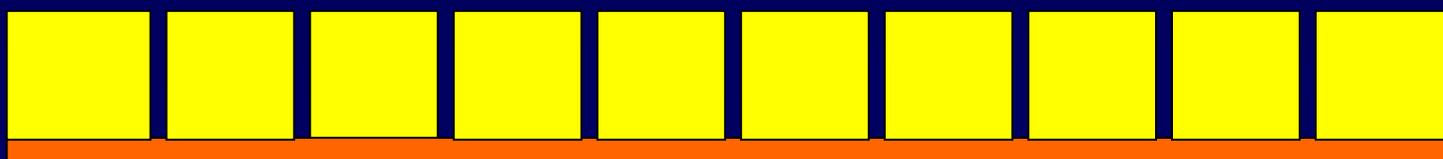
Elective

M1



Clinical clerkship

M2



M3



Professional Education Bachelor

Coach groups

- 10 students
- 1 coach
- 6-8 meetings/year
- attendance at 2 consultations of the coach
- visit at home of a patient from the coach his practice
- working out tasks related to several competencies

Coach

Year 1

General Practitioner

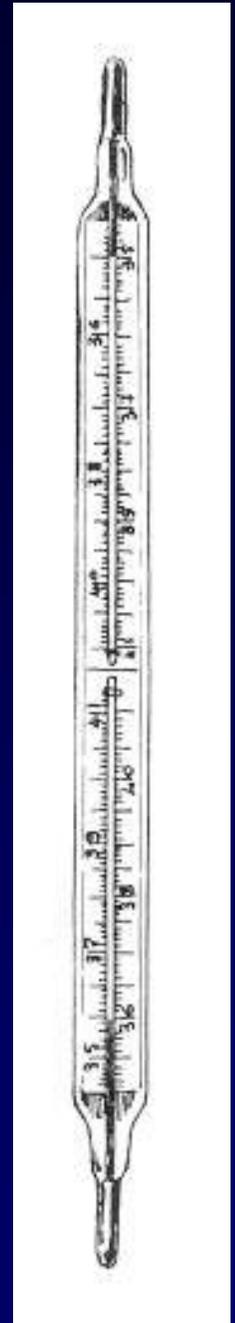
Year 2

Clinical consultant

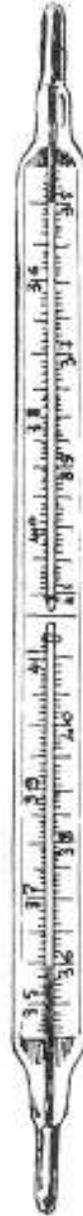
Year 3

Social Health care
specialist

- Organization of internal and external assurance processes in medical education.
- Does this help to improve the educational process?
- How is the question of examinations addressed in quality assurance?
- How do exams link to competences?



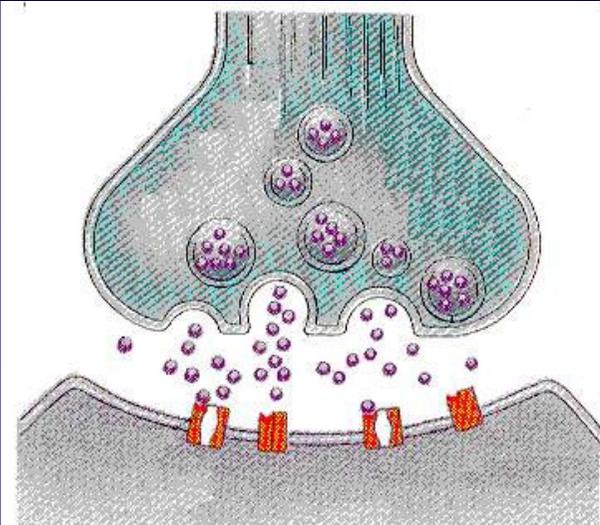
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Input



Educational
Transmission
Process



Output

Servo-system



Output

Subjective Satisfaction

Meeting Goals

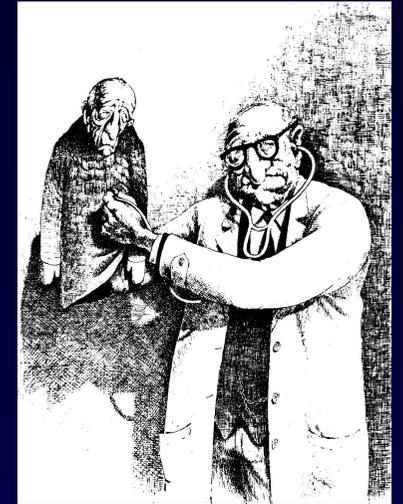
Teachers

Students

Blueprint

Exam results

Long term yield



Output

Subjective Satisfaction

Meeting Goals

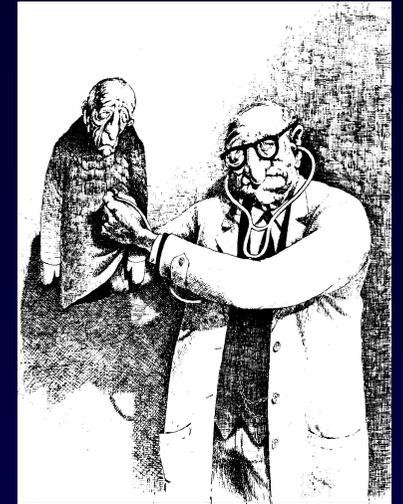
Teachers

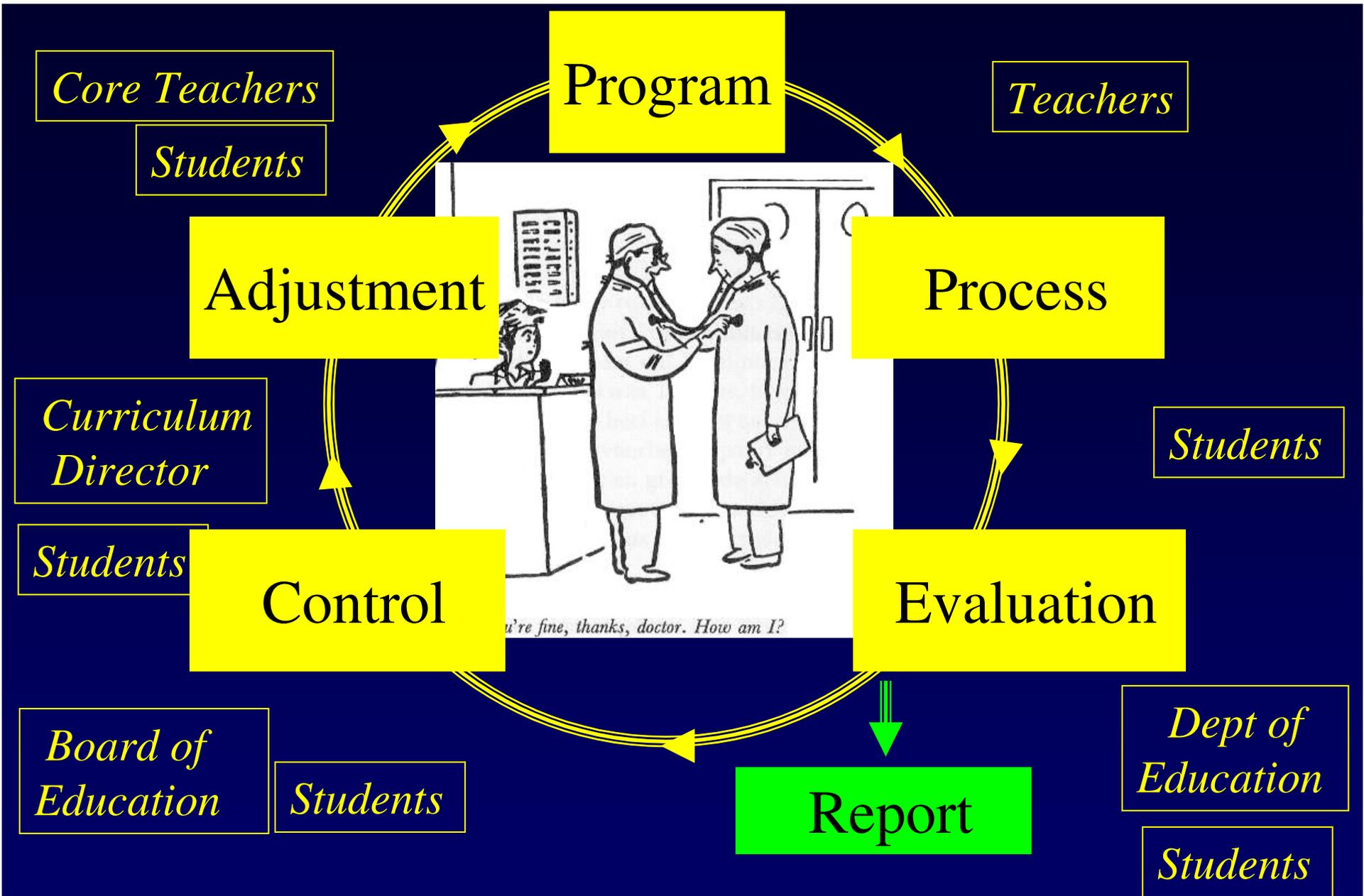
Students

Blueprint

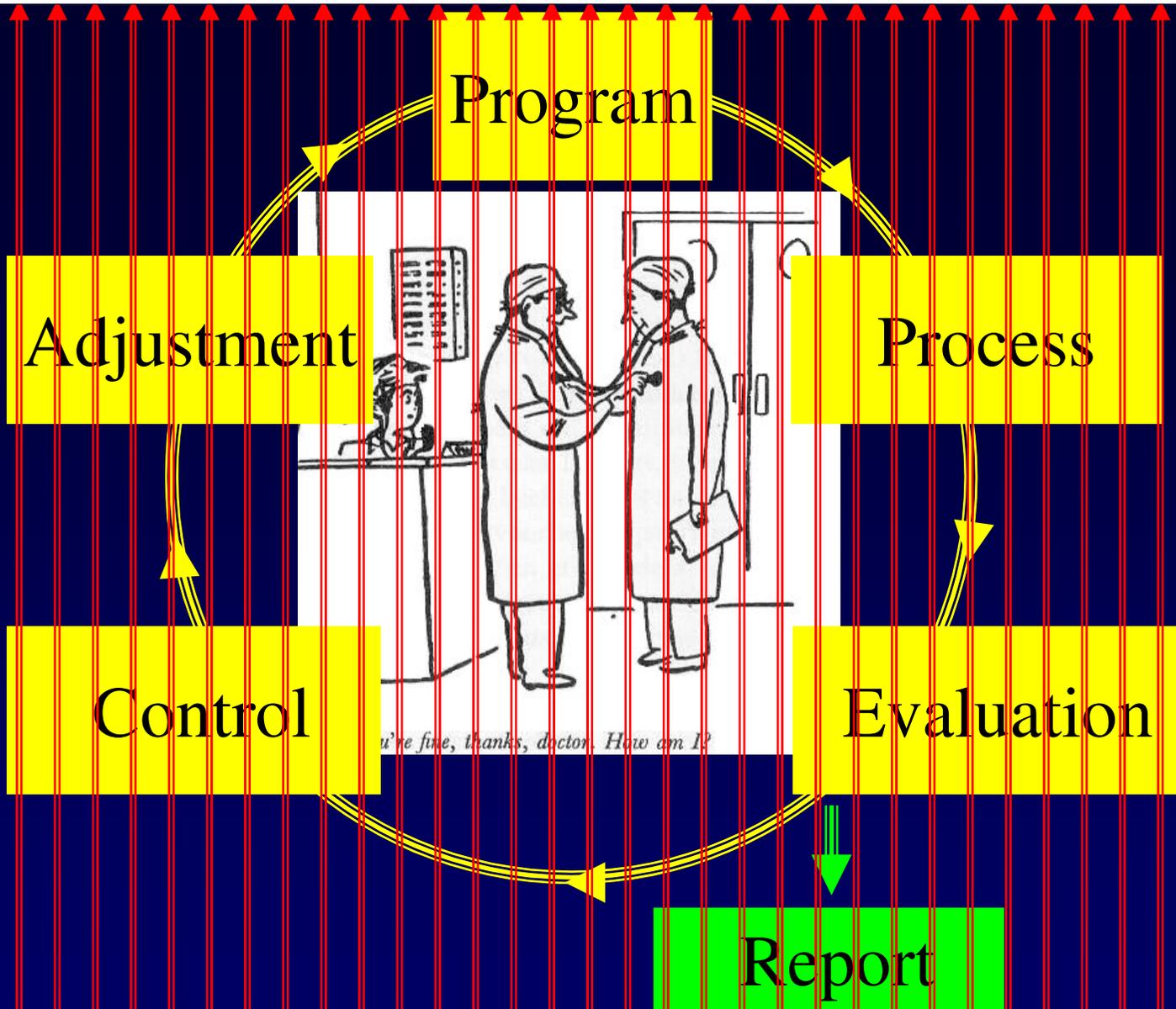
Exam
results

Long term
yield





Internal Quality Assurance Process



External Quality Assurance Process

Questions to be dealt with in the external quality assurance process

Blueprint and philosophy
the learning program

Examinations

Yields and outputs

Learning concept
learning tools

Facilities

Appreciation of the program
(students, teachers)

Efficiency/heaviness
program

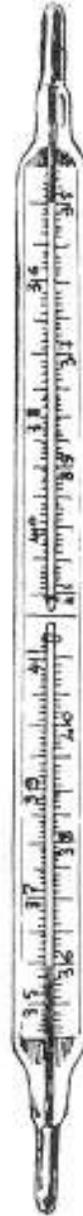
Quality of the graduates

International contacts

Internal quality assurance

Organization

- Organization of internal and external assurance processes in medical education.
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- How is the question of examinations addressed in quality assurance?
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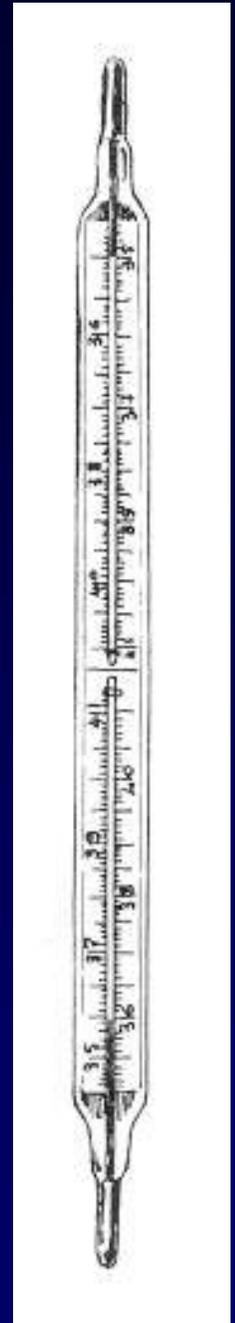
- Drive for optimal performance
(curriculum organization)
- Justification for demands on efforts of departments
- Support of requests to the hospital and faculty

- Lots of time and paper
- Frustration for those who make the best of it and are not well-understood

Internal audits
in affiliated
hospitals



- Organization of internal and external assurance processes in medical education.
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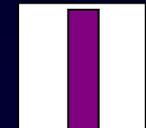
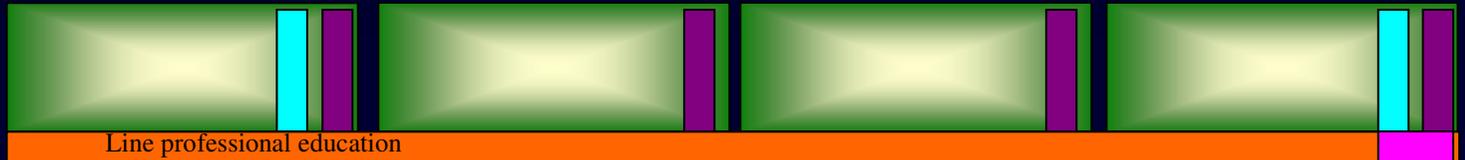
Exams

- Take many samples with many raters
- Try to validate the system
- Offer a large variety

Types of examinations

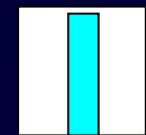
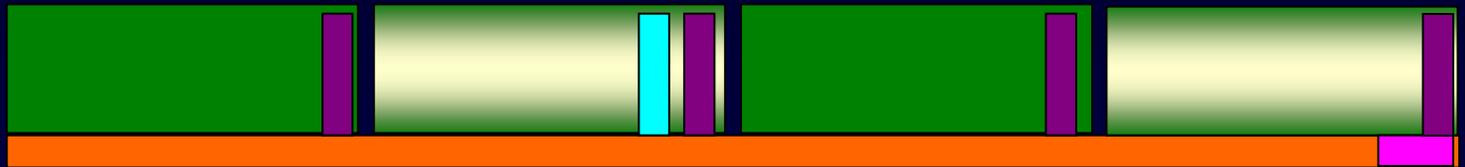
- Written examinations
- Oral examinations
- Portfolio
- Skill tests
- Clinical exams
- Theses

B1



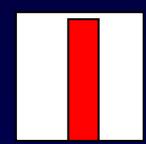
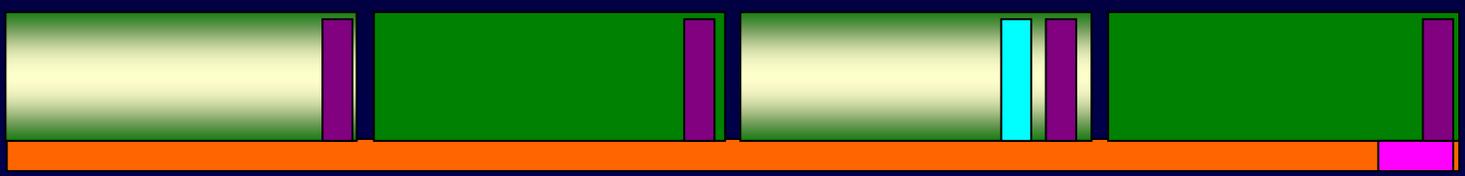
Written

B2



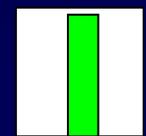
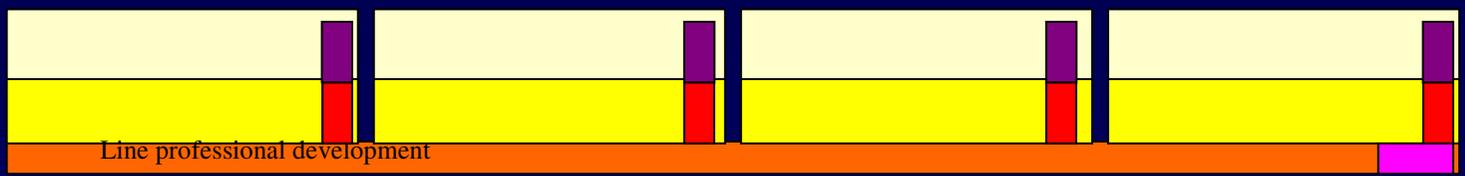
Oral

B3



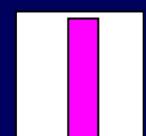
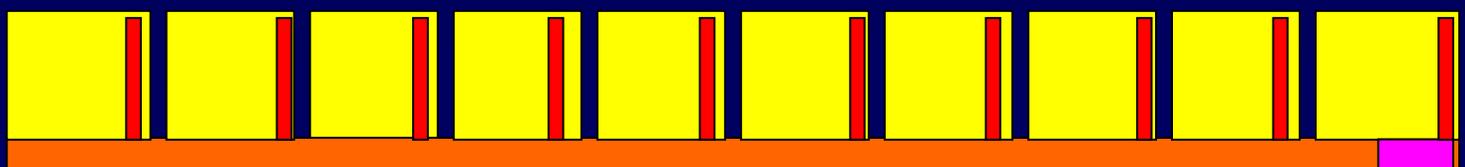
Clinical Ex

M1



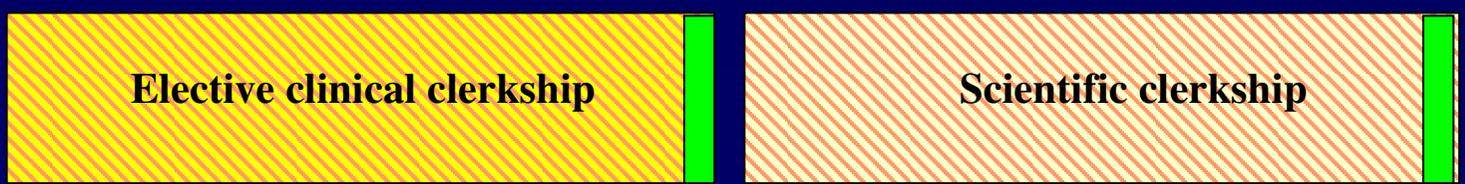
Thesis

M2



Portfolio

M3



Types of examinations

- Written examinations
- Oral examinations
- Portfolio
- Skill tests
- Clinical exams
- Theses

To test knowledge
Always MCQ's

Input
(teachers)

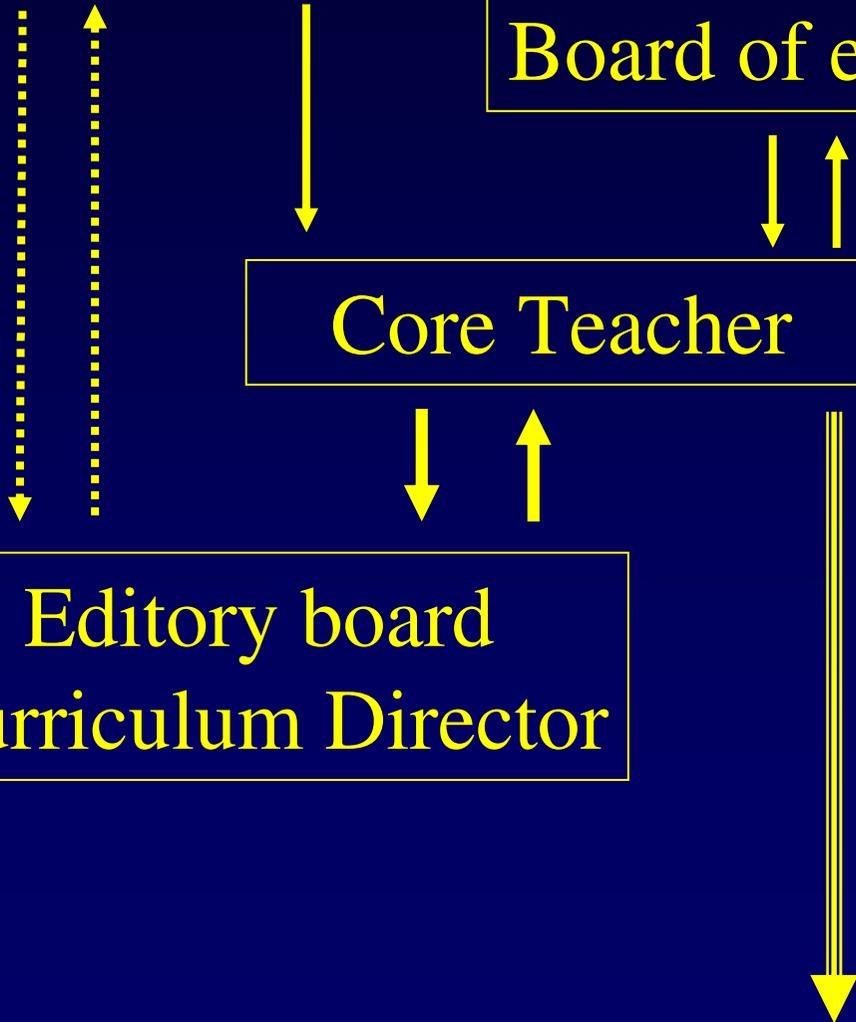
*Quality assurance
written exams I*

Board of experts

Core Teacher

Editorial board
Curriculum Director

Questions



*Quality assurance
written exams II*

Testsresults

Computer

Comments
of students

Elimination of
test-items

Cut-off
point

Examination
board

Exam mark

Types of examinations

- Written examinations
- Oral examinations
- Portfolio
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Mostly to test
competences

Example of a problem for an oral exam

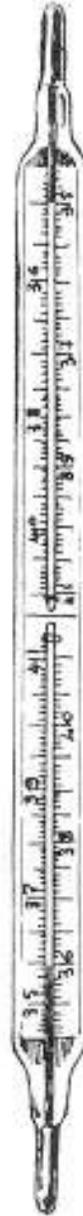
Clinical vignette with data on clinical history and results of clinical examination.

- Which is the most likely diagnosis?
- Write a letter for referral to a specialist
- Find a therapy and write a prescription
- Explain your findings and your policy to the patient
- Is there a scientific basis for the therapy of your choice?
- Etc.....

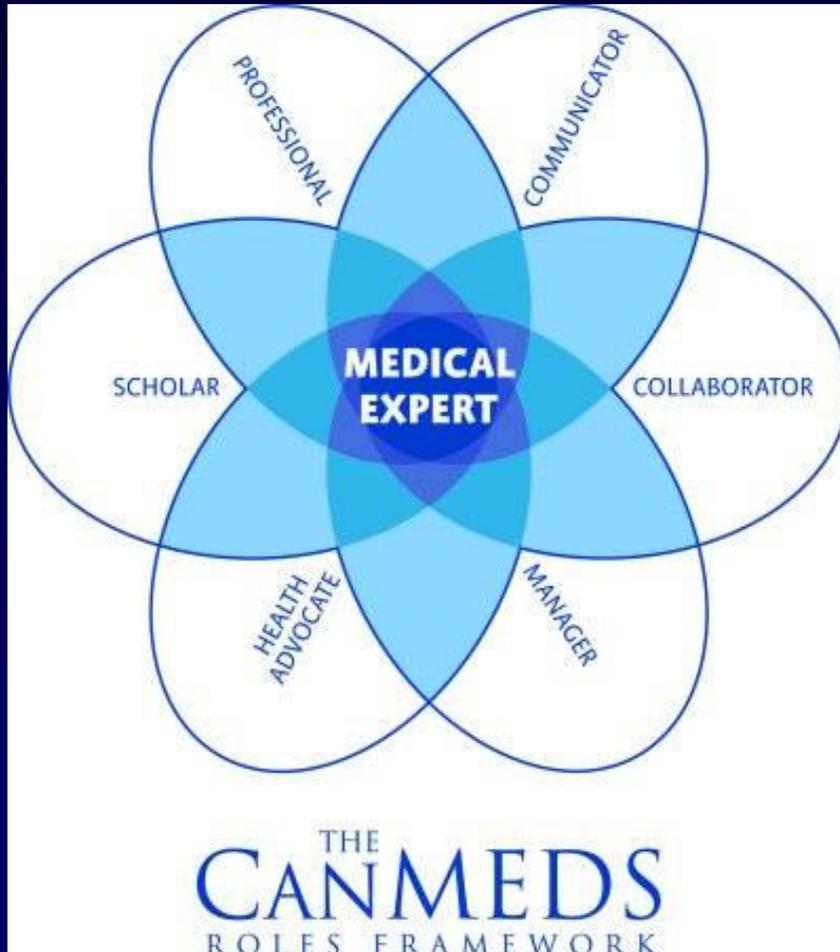
How is the question of examinations addressed in quality assurance?

- Pretest control procedure
- Posttest control procedure
- Students are given the opportunity of reclamation
- Results are considered in the light of output

- Organization of internal and external assurance processes in medical education.
- Does this help to improve the educational process?
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- How exams link to competences?



7 competencies



- Communication
- Clinical Problem Solving
- Applying knowledge & Science
- Clinical Skills
- Patient management
- Using Social context
- Reflection

Types of examinations

7 competencies

Written examinations •

Oral examinations •

Portfolio •

Skill tests •

Clinical exams •

Theses •

• Communication

• Clinical Problem Solving

• Applying knowledge & Science

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• Patient management

• Using Social context

• Reflection

Types of examinations 7 competencies

Written examinations •

Oral examinations •

Portfolio •

Skill tests •

Clinical exams •

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• Clinical Problem Solving

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Portfolio •

Skill tests •

Clinical exams •

Theses •

• Communication

• Clinical Problem Solving

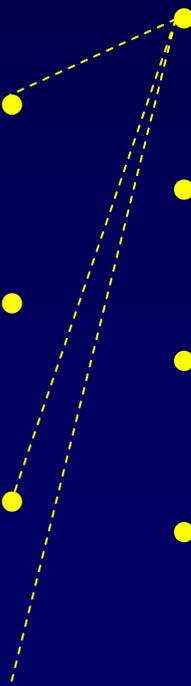
• Applying knowledge & Science

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Types of examinations 7 competencies

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• Communication

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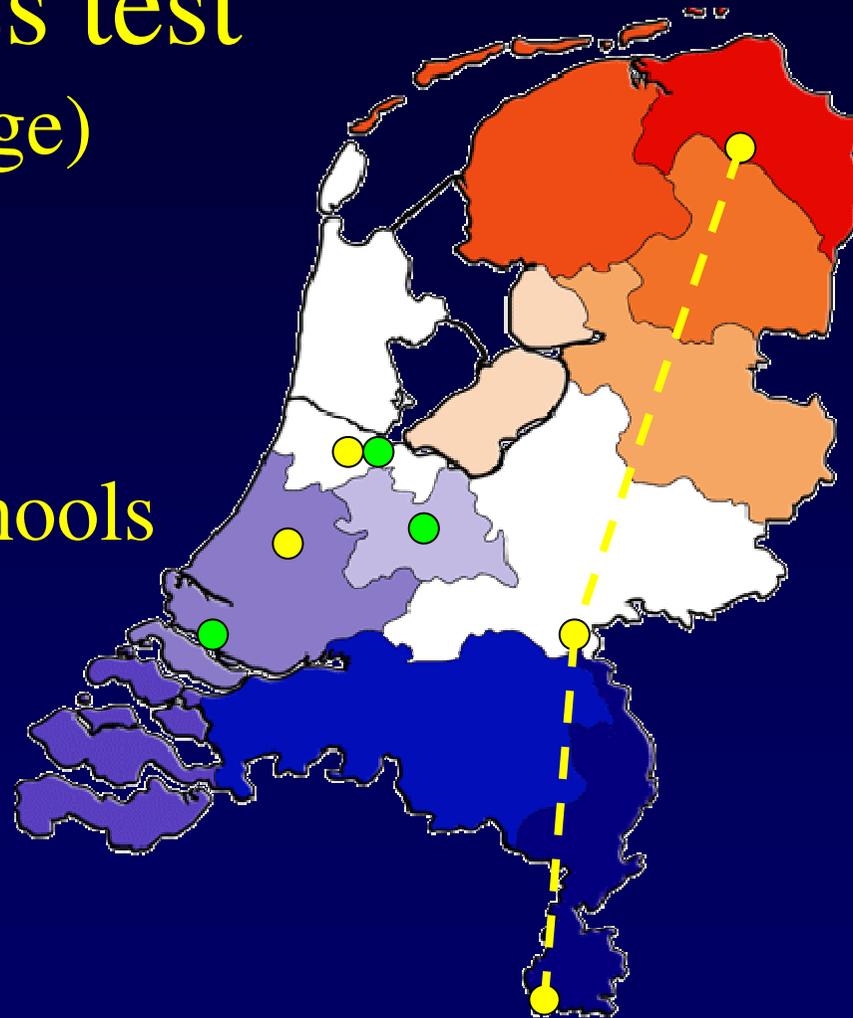
• Patient management

• Using Social context

• Reflection

National progress test (medical knowledge)

To compare with
other medical schools
To test the long term
yield



Implications for a European BaMa Structure

- Standardized Blue Print for Ba & Ma
- International Quality Assurance
- How far need of similarity?
- Central examination?

Workshop 2

Organization of medical examinations and quality assurance: best practice



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...the first of these is the fact that the ...

...the second of these is the fact that the ...

...the third of these is the fact that the ...

...the fourth of these is the fact that the ...

...the fifth of these is the fact that the ...

...the sixth of these is the fact that the ...

...the seventh of these is the fact that the ...

...the eighth of these is the fact that the ...

...the ninth of these is the fact that the ...

...the tenth of these is the fact that the ...

...the eleventh of these is the fact that the ...

...the twelfth of these is the fact that the ...

...the thirteenth of these is the fact that the ...

...the fourteenth of these is the fact that the ...

...the fifteenth of these is the fact that the ...

...the sixteenth of these is the fact that the ...

...the seventeenth of these is the fact that the ...

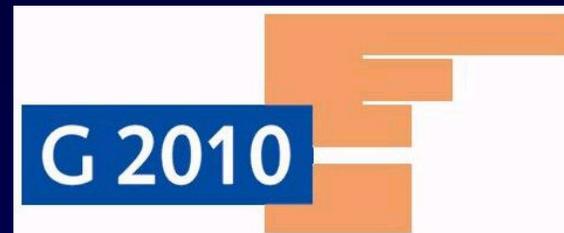
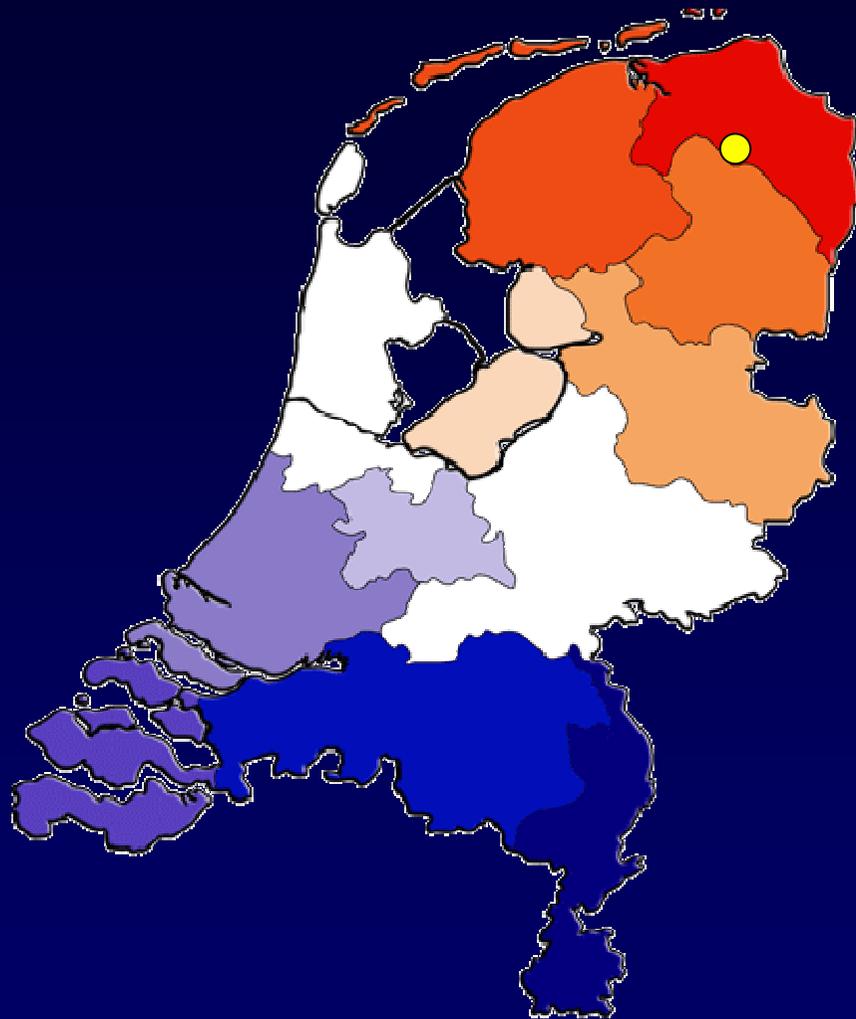
...the eighteenth of these is the fact that the ...

...the nineteenth of these is the fact that the ...

...the twentieth of these is the fact that the ...

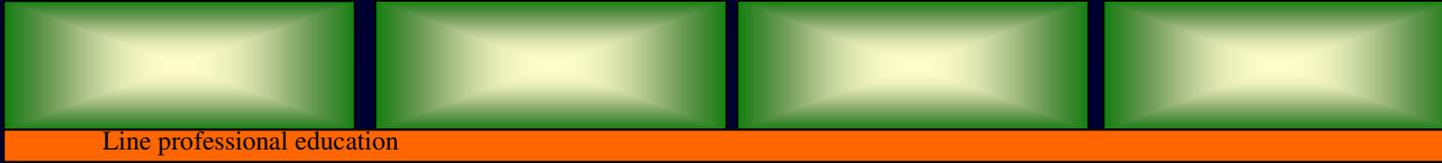
Questions to be dealt with in the external quality assurance process

- Blueprint and philosophy of the learning program
- Learning concept, learning tools
- Examination
- Appreciation of the program (students, teachers)
- Efficiency/heaviness of the program
- Quality of the graduates
- Organization
- Facilities
- International contacts
- Internal quality assurance
- Yields and outputs



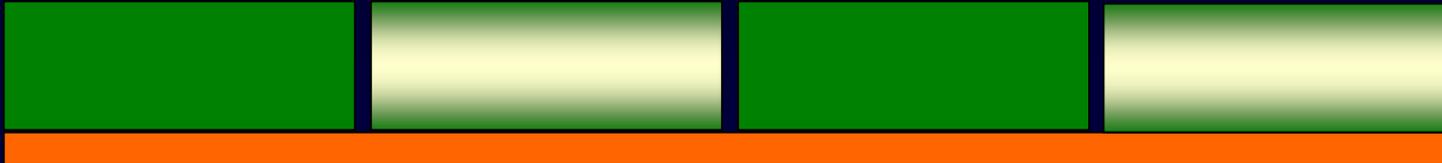
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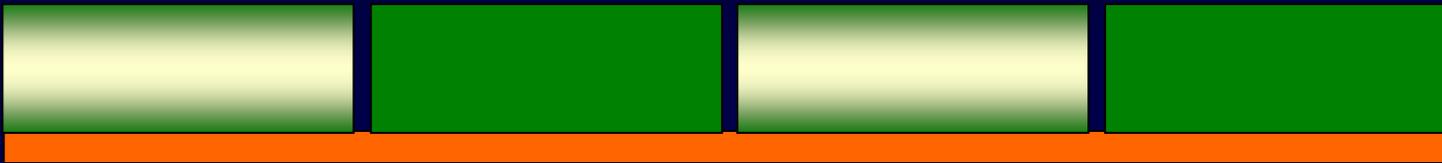
Theory

B2



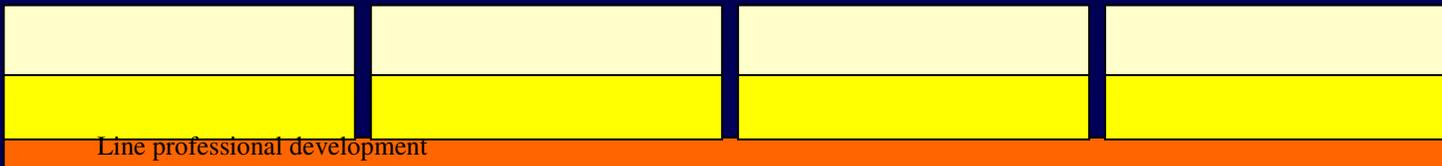
Training

B3



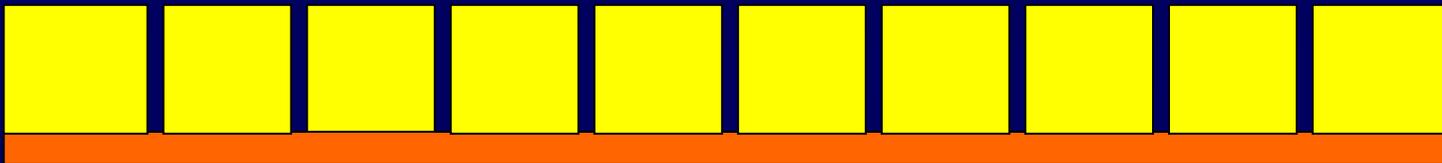
Elective

M1

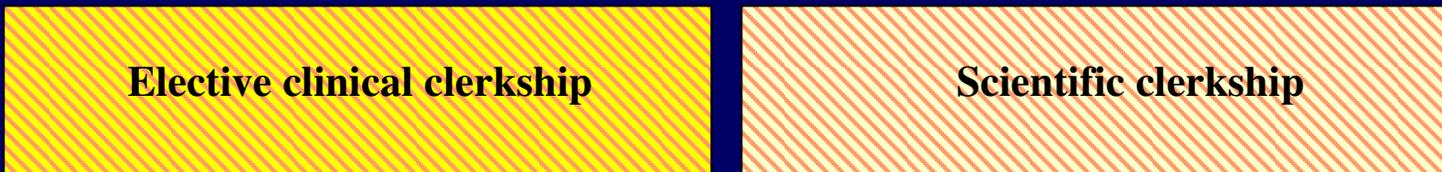


Clinical clerkship

M2



M3



Pc Value	Rit < -x	-x < Rit < x	x ≤ Rit < 2x	Rit ≥ 2x
> .85	+	+	+	+
.55 < Pc ≤ .85	-	+	+	+
.25 < Pc ≤ .55	-	?	+	+
0 < Pc ≤ .25	-	-	+	+
-.25 < Pc ≤ 0	-	-	?	+
-.50 < Pc ≤ -.25	-	-	-	?
-1 < Pc ≤ -.50	-	-	-	-

Pc P-value corrected for number of options
 P Percentage of correct answers
 RIT Item-test correlation