Joint Action Health Workforce
Planning and Forecasting

Students orientation, selection and support to the development of professional identity: experience and ongoing research in Italy

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An overview

1. Some background information
2. A reference framework
3. Orientation
4. Selection
5. Monitoring the progress of medical students
6. Conclusions
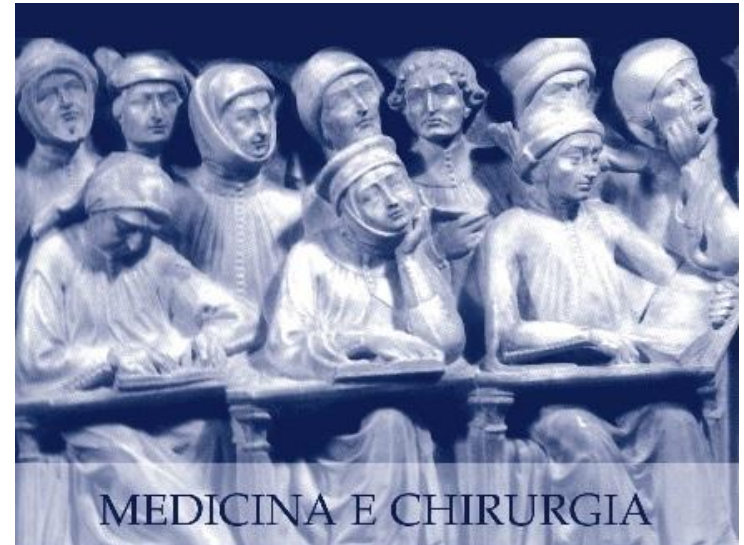
I'll just consider medical students …

BACKGROUND:
ACTORS AND PROCESSES

The Conference of Directors of Medical Curricula

It is a self-organized body aimed to
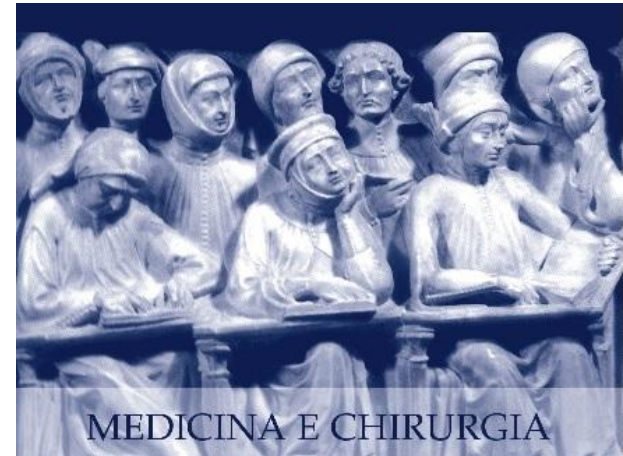
- Promote homogeneity among the **49 Italian curricula**

- Discuss and agree **possible solutions** to the challenges raised by new regulations

- Enhance the **quality** of teaching/learning

MEDICINA E CHIRURGIA
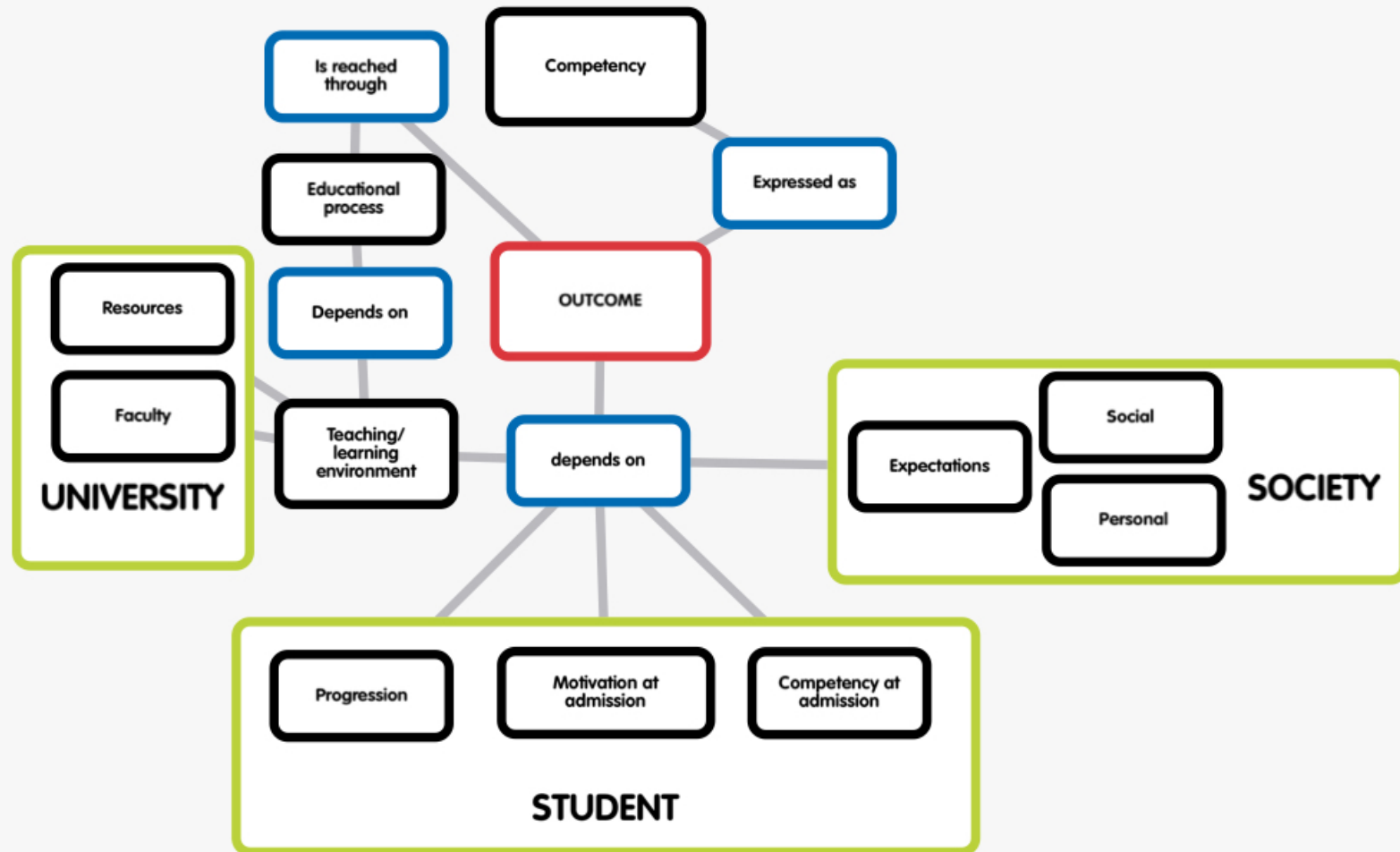
BACKGROUND:
ACTORS AND PROCESSES

The Conference of Directors of Medical Curricula

- Four meetings/year

- Faculty development

- Working groups (monitoring and proposals)

- On site visits

- Progress test

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A REFERENCE FRAMEWORK
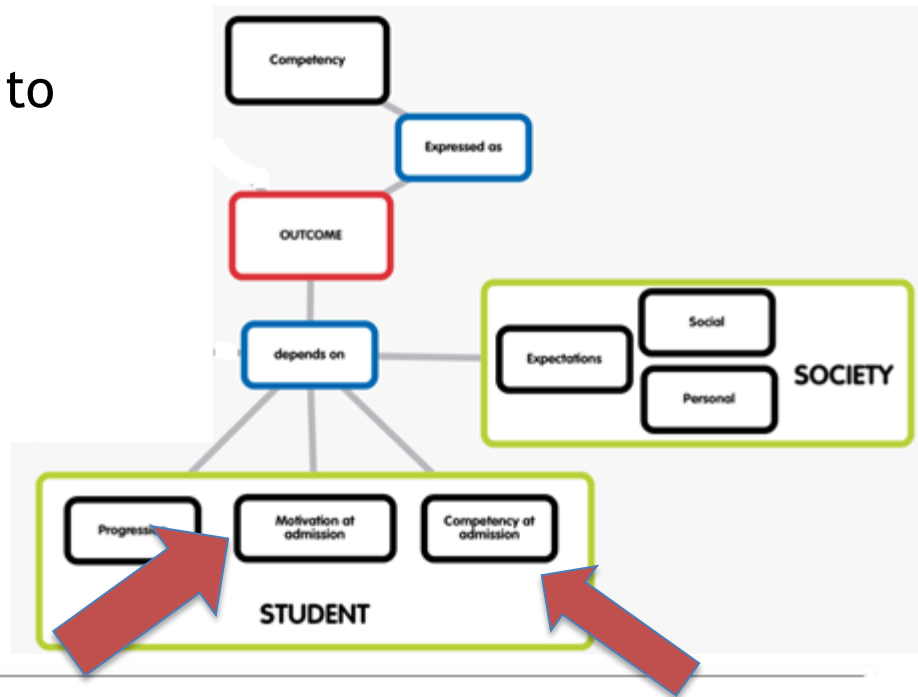
ORIENTATION

Two types of activities:

1. **Pre-admission courses**: to increase knowledge and skill to face the national admission test

2. **Vocational orientation**: addressed to
   - Enhance students' **awareness** on own attitudes, preferences and expectation
   - Enhance students' knowledge on **social expectation** and epidemiological needs in Italy

ORIENTATION
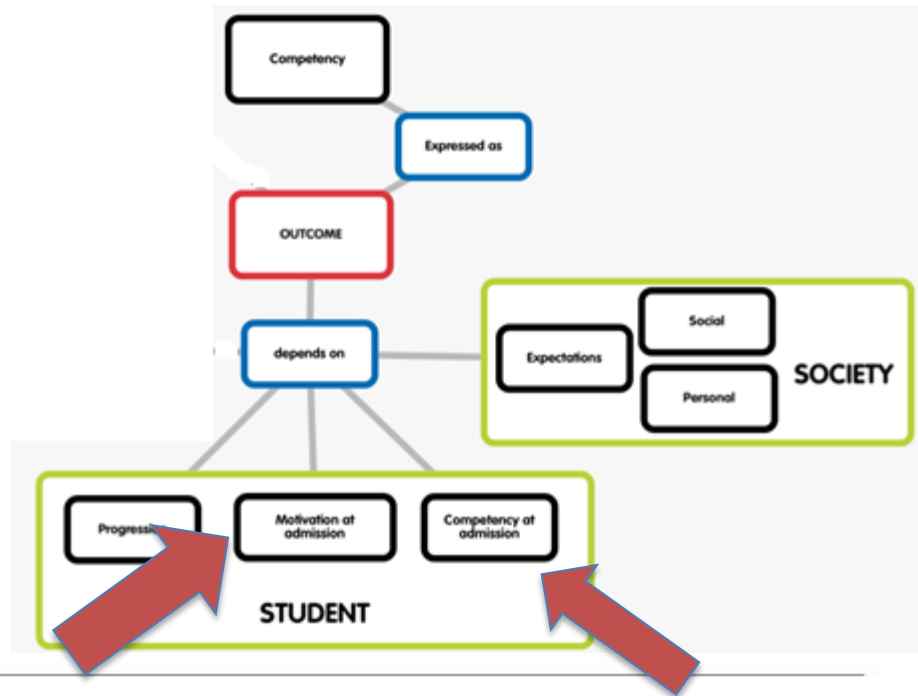
Two types of activities:

1. **Pre-admission courses**
   - Summer classes at the Universities
   - On-line courses through the web

2. **Vocational orientation**
   - Meetings at high schools
   - Intensive weeks
   - Stages at healthcare facilities
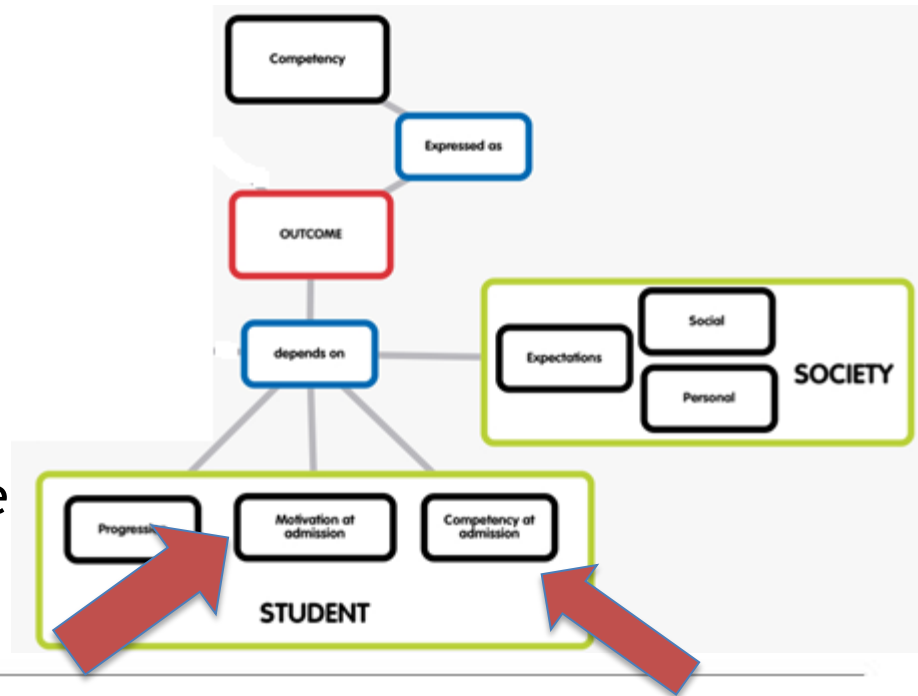
SELECTION

CANONICAL TRAITS *
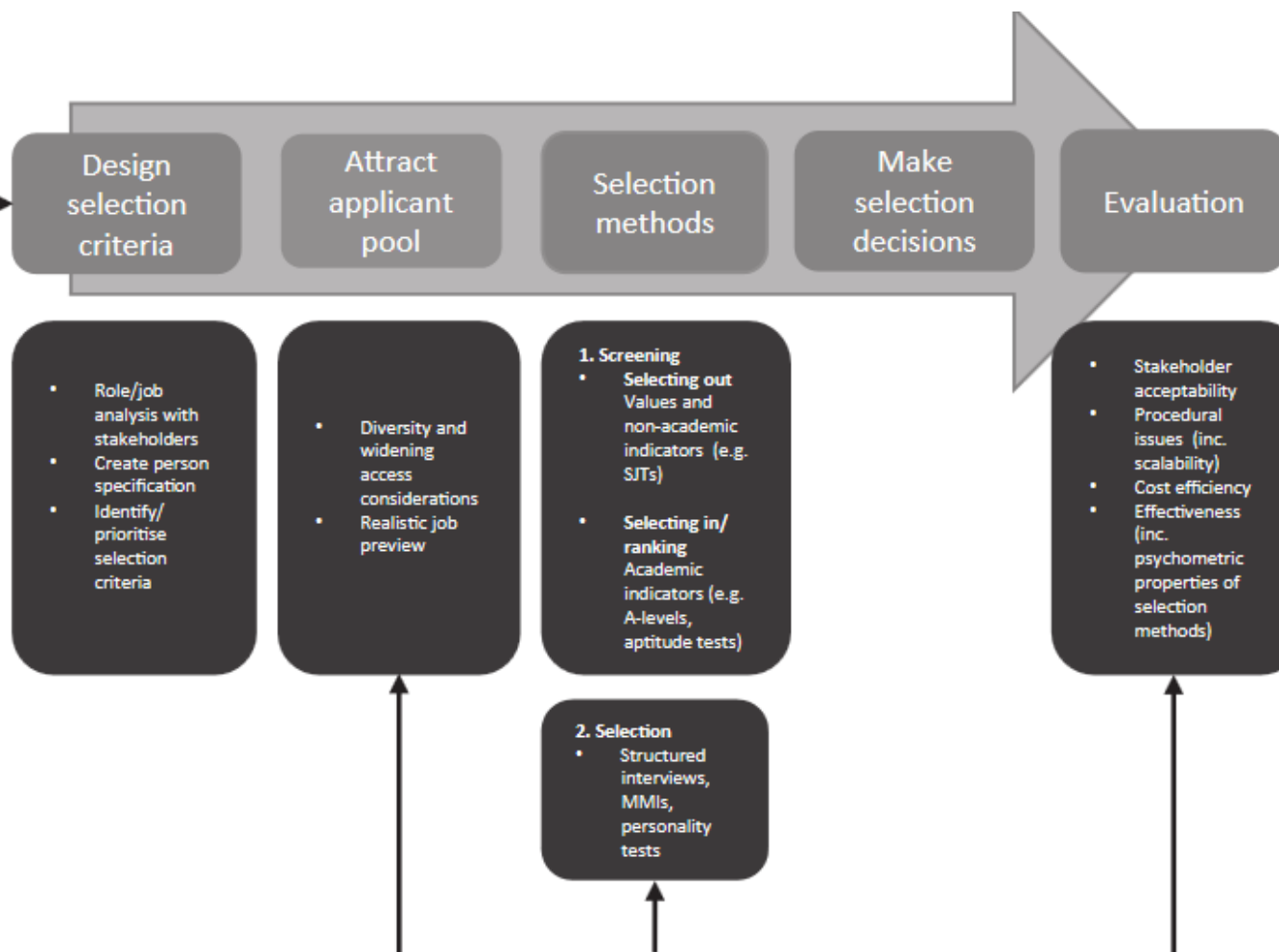
- Intellectual ability
- Learning style and motivation
- Communicative ability
- Personality

SURROGATE FACTORS

- Correlated with canonical traits
- Easier to be measured
 - E.g.: high school diploma score

* McManus C. Student selection.
In: A practical guide for medical teachers .
J.A. Dent and R.M. Harden eds. Elsevier
Churchill Livingstone, pp. 353-361, 2013.

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SELECTION

1. Selection as a process and not a single shot trial

2. Cost/effective balance

Patterson F et al. How effective are selection methods in medical education? A systematic review. Med Educ. 2016 Jan;50(1):36-60.

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SELECTION

In Italy, at present: two main problems

1. **Mono-dimensional** method of selection (MCQs on logics and basic sciences)

2. **Selecting** (...and educating) young people who are going to practice 6 + 3-5 (residency!!) = **9-11 years later**
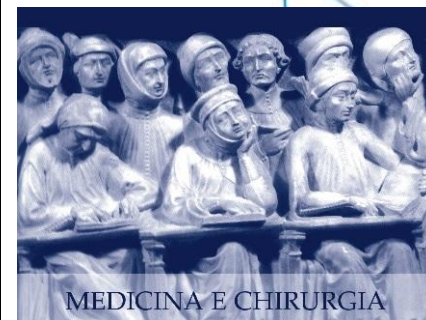
Two answers:

1. **Search** for a better and feasible selection process

2. **Develop** a process of monitoring of professional image

SELECTION and MONITORING

1. **Search** for a better and feasible selection process

2. **Develop** a process of monitoring of professional image

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A research project on a new model of selection and monitoring
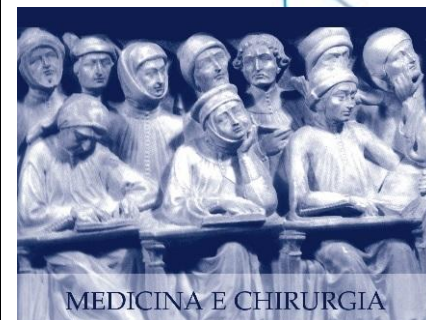
1. To define a set of indicators (knowledge, aptitude, traits) **predictive of academic success**
2. To describe the **trajectories of development** during the academic years
3. To define **risk and success indicators** during the curriculum
4. To develop a framework to define "**professional success**" as an outcome

SELECTION and MONITORING

Longitudinal study on 6 medical curricula
- Two in the north
- Two in the centre
- Two in the south/big islands
- Some high schools of the same towns

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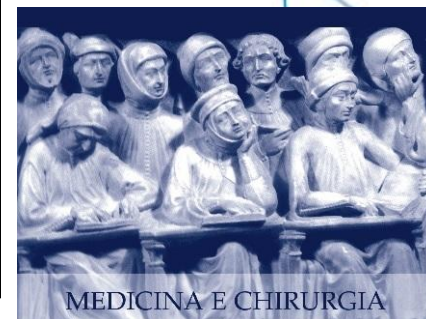
| Admission test	Beginning 2° y	End of 4° y.	End of 6° y.	2 ys. after degree
-Socio-economic info -Aptitude test -Personality test **882 students Sept. 2014**	-Aptitude test -Students' satisfaction -Academic indicators	-Personality test -Defense style test -Academic indicators	-Aptitude test -Personality test -Students' satisfaction -Academic indicators	-Retrospective satisfaction -Occupational condition (Almalaurea system)
	Interview	Interview	Outplacement interview	

MONITORING of KNOWLEDGE

Progress test: a 300 items MCQs test

• in all Italian medical curricula

• in the same day

• with the same questions for all years

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PROGRESS TEST - 2006 - 07 - 08 - 09 - 10 - 11 - 12 - 13 - 14

Numero degli Studenti Partecipanti/anno di corso

Anno di Corso	2006	2007	2008	2009	2010	2011	2012	2013	2014	
1° anno	879	2504	4353	3366	3683	-----	3095	3366	4408	+ 31 %
2° anno	0	1068	2871	2972	3669	3602	4170	3508	4804	+ 15 %
3° anno	0	516	2592	2621	2968	3929	4012	3158	4433	+ 10 %
4° anno	2271	1927	1728	2087	2119	3032	3070	2839	3460	+ 13 %
5° anno	80	1574	1664	1067	1527	1876	2420	2363	3193	+ 32%
6° anno	266	341	1594	1144	1312	1552	1920	2252	2657	+ 18 %
Totale	3496	7930	14802	13257	15278	13991	18687	1746	22955	
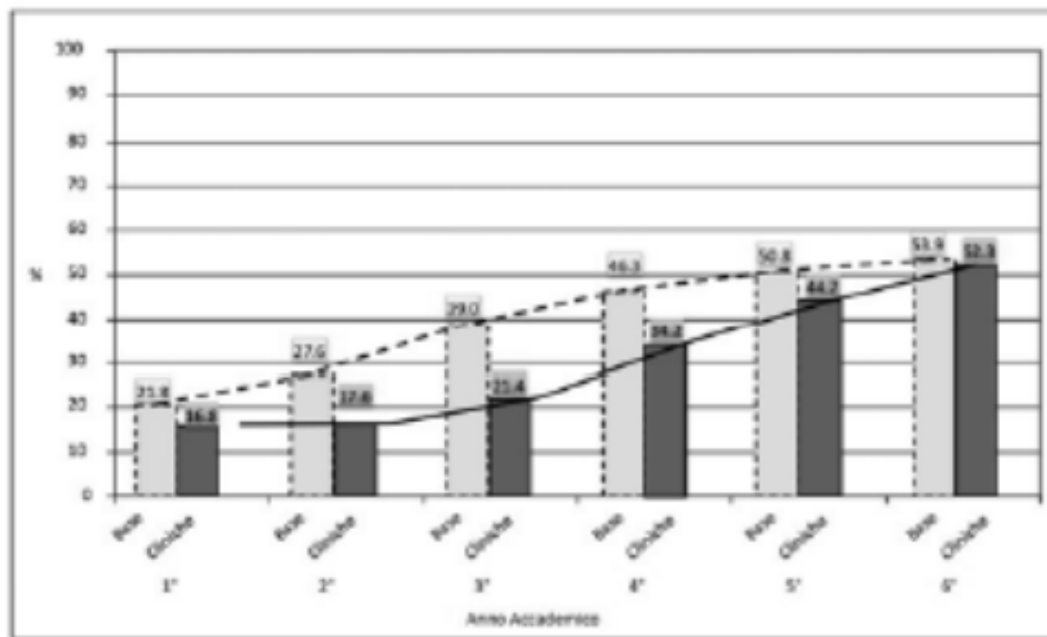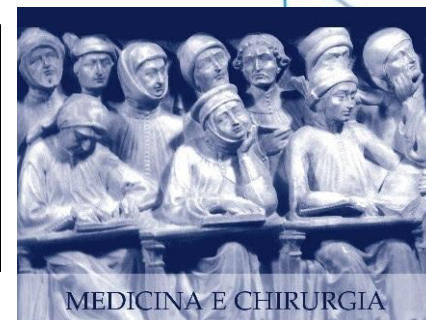
More than 50% of the Italian students tested

MONITORING of KNOWLEDGE

A 300 items MCQs test
- 150 MCQs on basic sciences
- 150 MCQs on clinical sciences

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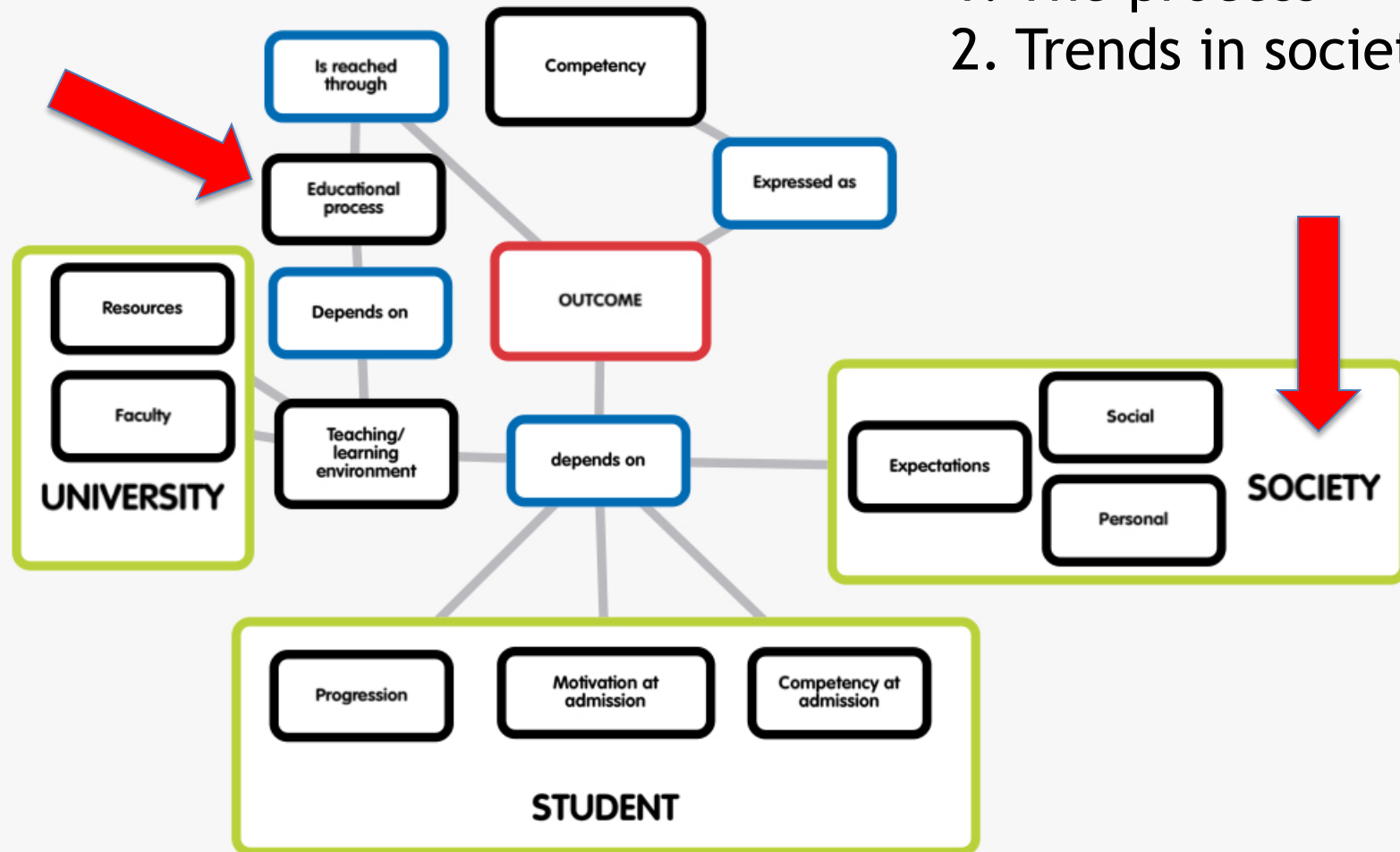
- Dotted line: basic sciences
- Continuous line: clinical sciences

Two different profiles of development
→ The process of personal development is NOT linear

MONITORING

1. The process
2. Trends in society
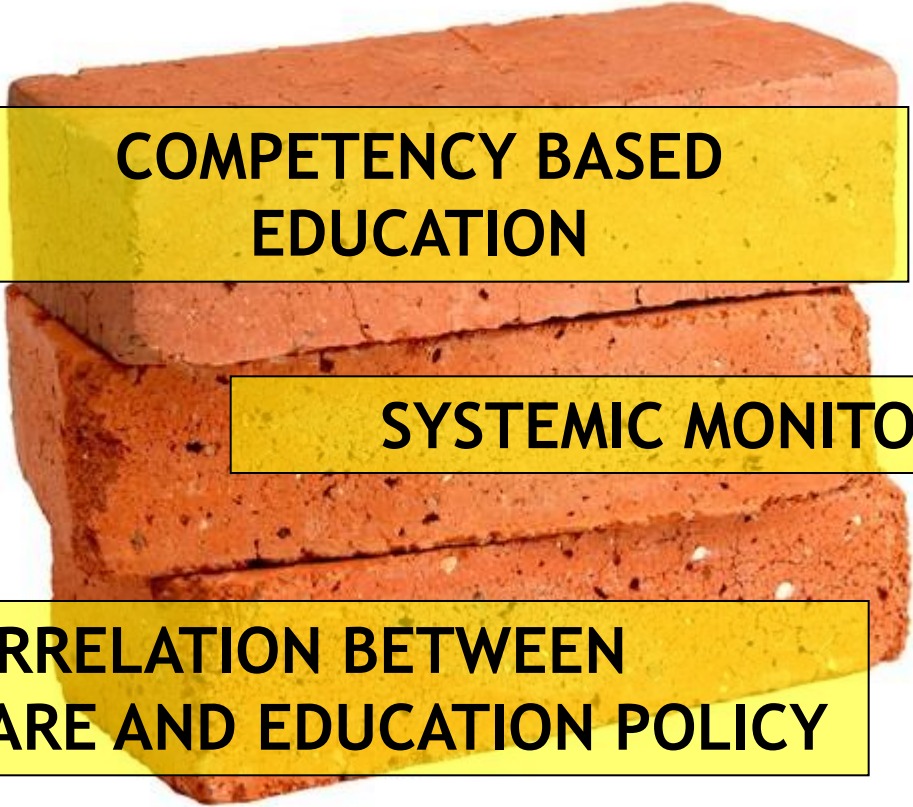
CONCLUSIONS -1

Education of health professionals for the future is a challenge which demands

1. To envision the trends of healthcare needs, adopting a **systemic approach** to model

    a. health and healthcare determinants

    b. educational determinants

2. To select candidates with the best possible **likelihood** to become **good doctors**

3. To monitor the process of development of **competency**

CONCLUSIONS -2

COMPETENCY BASED EDUCATION

SYSTEMIC MONITORING

CORRELATION BETWEEN HEALTHCARE AND EDUCATION POLICY