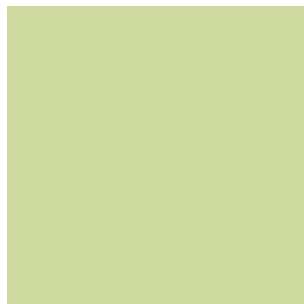



WELCHE KOMPETENZ BRAUCHT MAN ALS ARZT/ÄRZTIN IN 10-15 JAHREN?

Martin Fischer, Medizinische Fakultät und Klinikum der LMU
martin.fischer@med.uni-muenchen.de
<http://dam.klinikum.uni-muenchen.de>

3. April 2014



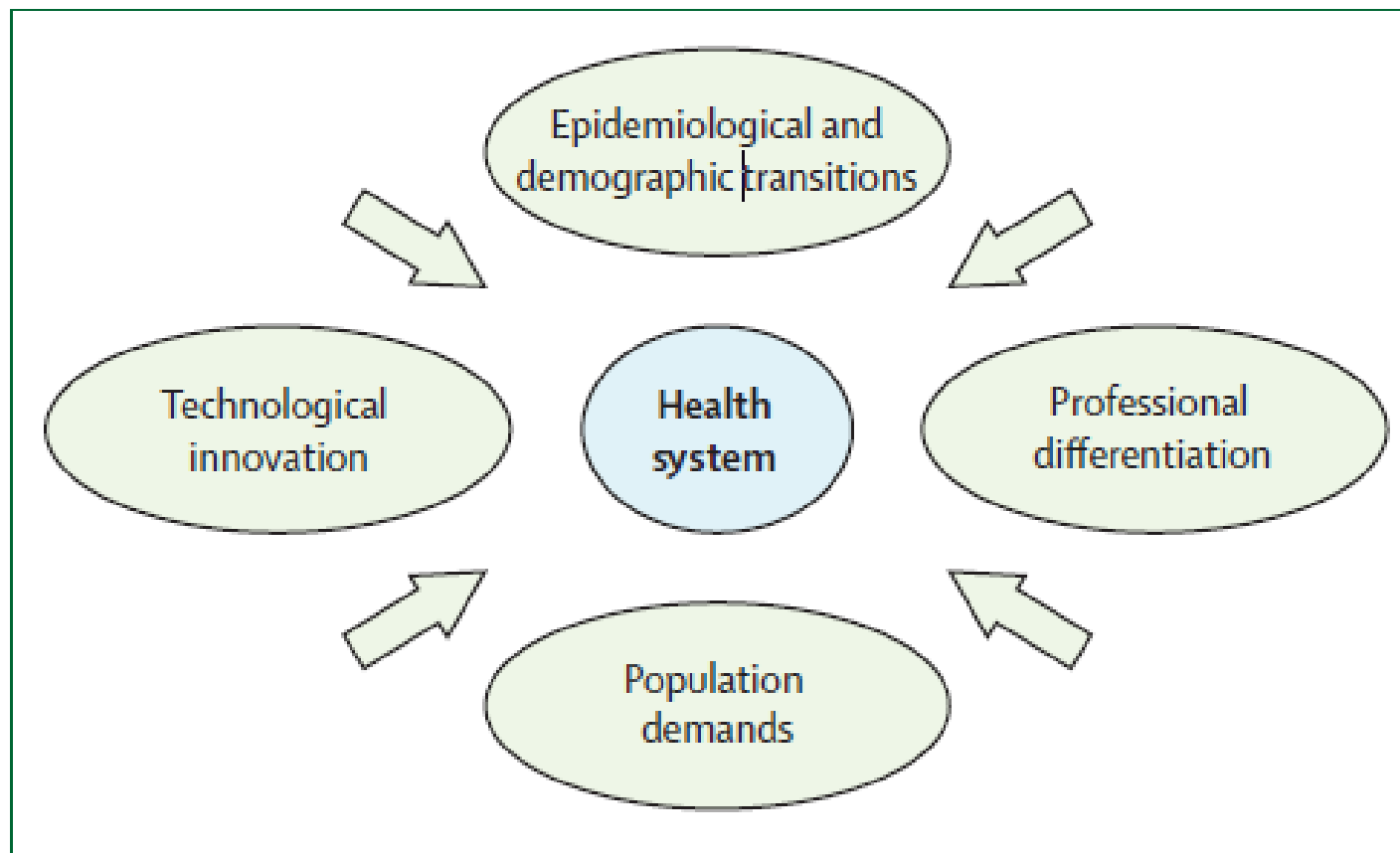


If you don't know where you
are going, any road will get
you there.

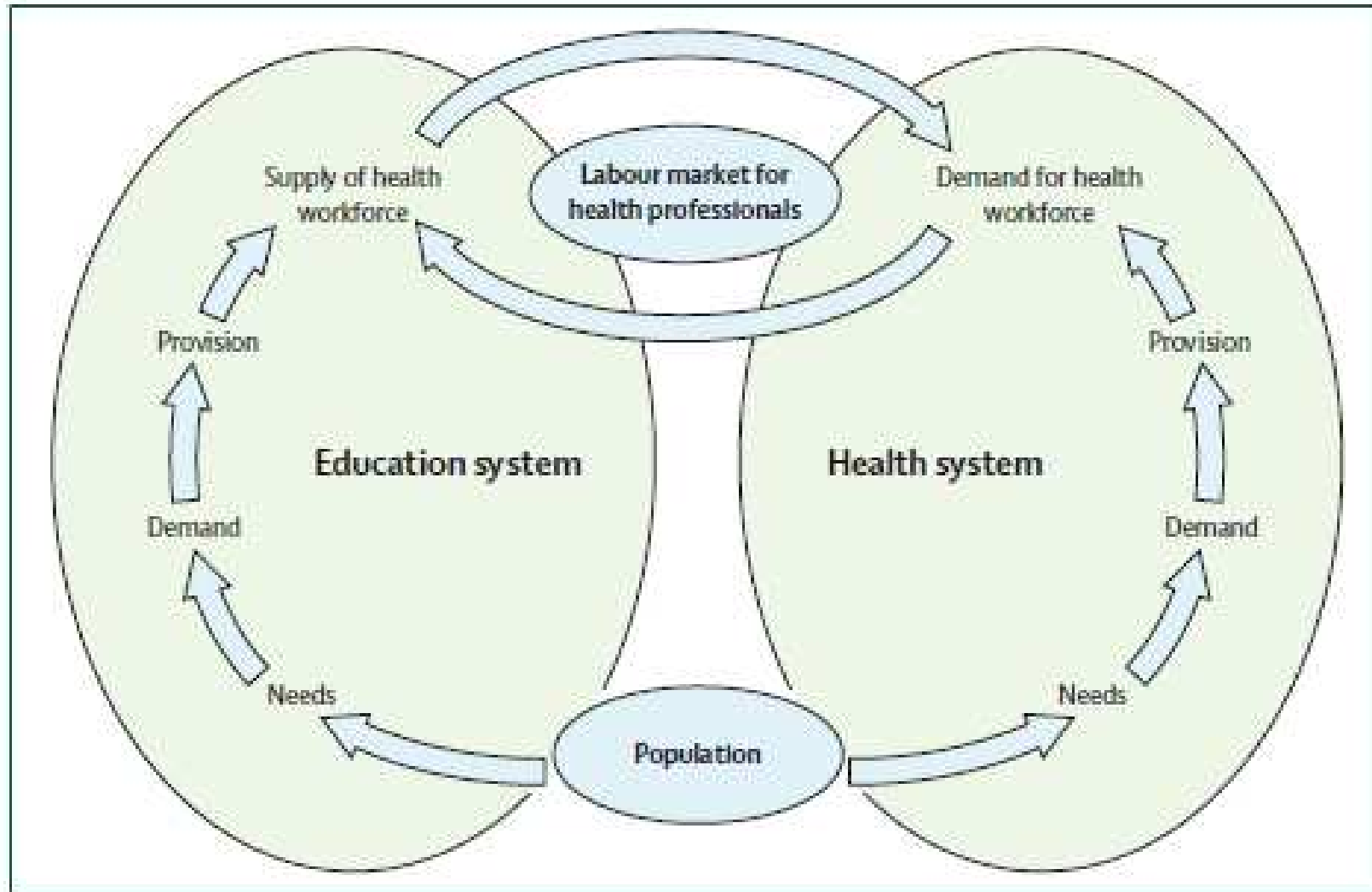
Henry Kissinger

Health professionals for a new century: transforming education to strengthen health systems in an interdependent world

Julio Frenk, Lincoln Chen*, Zulfiqar A Bhutta, Jordan Cohen, Nigel Crisp, Timothy Evans, Harvey Fineberg, Patricia Garcia, Yang Ke, Patrick Kelley, Barry Kistnasamy, Afaf Meleis, David Naylor, Ariel Pablos-Mendez, Srinath Reddy, Susan Scrimshaw, Jaime Sepulveda, David Serwadda, Huda Zuravk*



Systems Framework





COMPETENCE



CLINICAL RESEARCH
CENTER SALZBURG



PARTNER DER SALZBURGER LANDESKLINIKEN UND DER
PARACELSDUS MEDIZINISCHE PRIVATUNIVERSITÄT



MEDIZINISCHES
SIMULATIONSZENTRUM
SALZBURG

TRAINING FOR MEDICAL EXCELLENCE

Nationaler Kompetenzbasierter Lernzielkatalog für Medizin (NKLM)

On the way towards a National Competency-
based Catalogue of Learning Goals for
Medicine (NKLM)



MEDIZINISCHER
FAKULTÄTENTAG



supported by the Robert Bosch Foundation

Why NKLM in Germany?

Proposal of nationally agreed competencies as a basis for a core undergraduate medical education curriculum

- to improve students' preparation for professional life
 - to improve conjunction with PGE curricula
 - to enable communication with other health professions about competency profiles
-

Players in the NKLM development



Competence definition (1)

Competencies are „the available or attainable cognitive skills of an individual to solve certain problems and the related motivation and willingness to use these problem solutions in a socially responsible and accountable way.“

after Weinert 2002

Competence definition (2)

*“...professional competence is the habitual and judicious **use** of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflections in daily practice for the benefit of the individual and the community being served”.*

Epstein & Hundert, JAMA 2002

Millers Pyramide (1990)

DOES

SHOWS HOW

KNOWS HOW

KNOWS

**Competency levels
NKLM & NKLZ**

**Perform independently in
recognition of consequences**

**Perform or demonstrate
under supervision**

**Elaborative and
procedural knowledgde
(why and how)**

**Descriptive knowledge
(what)**

SCLO (smifk 2008)

General Skills Level 2
Routine

**General Skills
Level 1**
some practical
experience

**Further Knowledge
Level 2**
able to cope with
in practice

**Further Knowledge
Level 1**
overview level

Clinical Pictures Level 2
able to cope with
in practice

Clinical Pictures Level 1
define in broad terms
without details

Milestones in NKLM

- 1. Basic principles and concepts**
 - 2. Scientific critical thinking and reasoning**
 - 3. Clinical basics (patient contact)**
 - 4. Final year (Praktisches Jahr = electives)**
 - 5. Readiness for PGE
(„Weiterbildungskompetenz“)**
-

Section II
knowledge, skills
and attitudes

Principles of normal
structure and function

Pathogenetic
principles

Scientific skills

Clinical skills

Communication
skills

Diagnostic
principles

Therapeutic
principles

Emergencies

Ethics

Prevention

Section I
Competency roles

Medical
expert

Scholar

Communicator

Member of a team

Health advocate

Manager

Professional

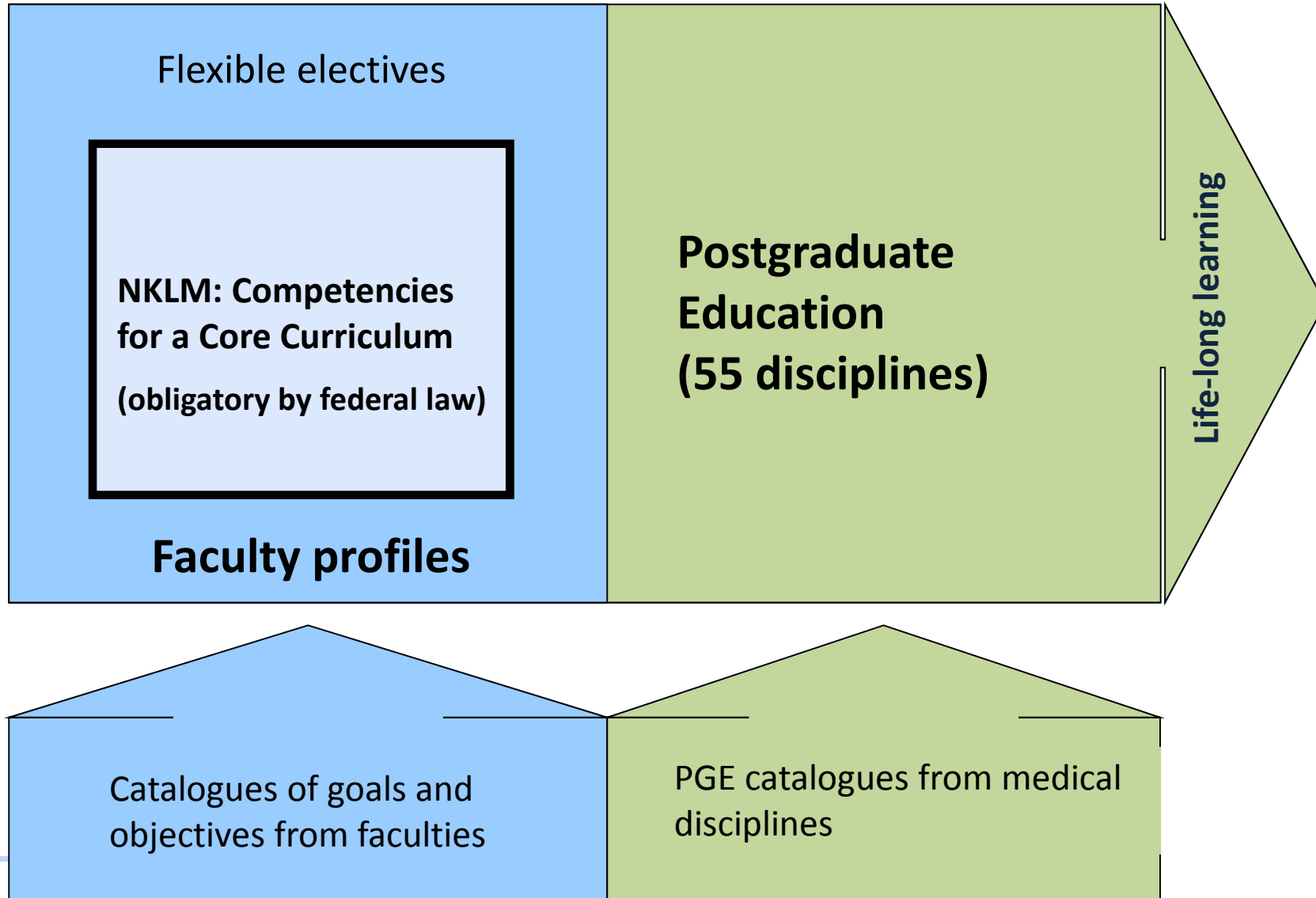
Section III
Patient-centered
health care

Signs, symptoms
and findings
as a starting point
for consulting
a physician

Disease related
prevention,
diagnostics,
therapy and
management
of care



Connecting the NKLM with „the real world“



Online: Consensus process with faculties and scientific medical associations



Willkommen beim Nationalen Kompetenzbasierten Lernzielkatalog Medizin und Zahnmedizin

Kompetenzorientierte Lernziele


stehen für das Medizin- und Zahnmedizinstudium in Deutschland noch nicht auf nationaler Ebene zur Verfügung. Deshalb erstellen die Gesellschaft für Medizinische Ausbildung (GMA) und der Medizinische Fakultätentag (MFT) mit Vertretern aus medizinischen Fachgesellschaften, Organisationen der Selbstverwaltung, zuständigen Ministerien und Behörden sowie Wissenschaftsorganisationen einen Nationalen Kompetenzbasierten Lernzielkatalog Medizin (NKLM) und Zahnmedizin (NKLZ).

Die bisher vorliegenden Entwürfe werden in einem Abstimmungsverfahren mit den Mitgliedsgesellschaften der AWMF (Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften e.V.) und den Medizinischen Fakultäten in Deutschland überprüft. Die Veröffentlichung der Kataloge ist für Juni 2014 geplant.

Benutzername

.....

www.nklm.de



**What are
core competences of
physicians
in 2030 and what
can be dropped?**

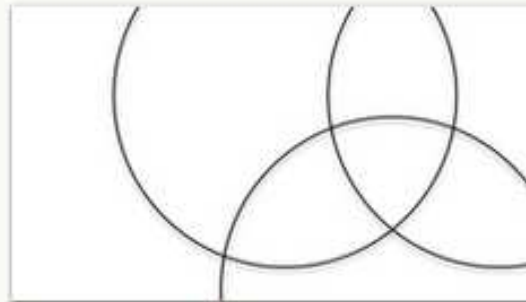


Ludwig-Maximilians-Universität München (LMU)

As one of Europe's leading research universities, LMU Munich is committed to the highest international standards of excellence in research and teaching. Building on its 500-year-tradition of scholarship, LMU covers a broad spectrum of disciplines, ranging from the humanities and cultural studies through law, economics and social studies to medicine and the sciences.



Competitive Strategy
Apr 11th 2014



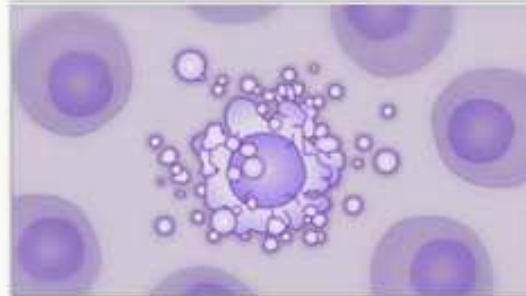
Introduction to Mathematical
Philosophy
Apr 14th 2014



Advanced Competitive Strategy
June 2014



Volcanic Eruptions: a material science.
Jul 23rd 2013



Programmed cell death
Date to be announced.

Some predictions on the safe side...

Health care **for**
patients and not
only against
diseases.

Physicians in 2030...

- **will be flexible information managers**
 - **protect themselves against continuous availability**
 - **will either be even more specialized or more integrative generalists to serve as pilots for patients route through the system**
 - **will be resource managers in a competitive system of care providers**
-

Physicians in 2030...

- **will be constant teachers and learners at the same time**
 - **will be more accountable for their actions**
 - **will be team leaders and team members in multiple health care contexts as well as in research and education**
-

Physicians in 2030...

- **will use scientific reasoning and argumentation in conjunction with information technology**
 - **will be clinical decision makers and communicators as partners of patients**
 - **will need to communicate errors and limitations of health care to patients and society**
-



There is a lot of work ahead of us to dig deeper for better answers.

Thank you!
