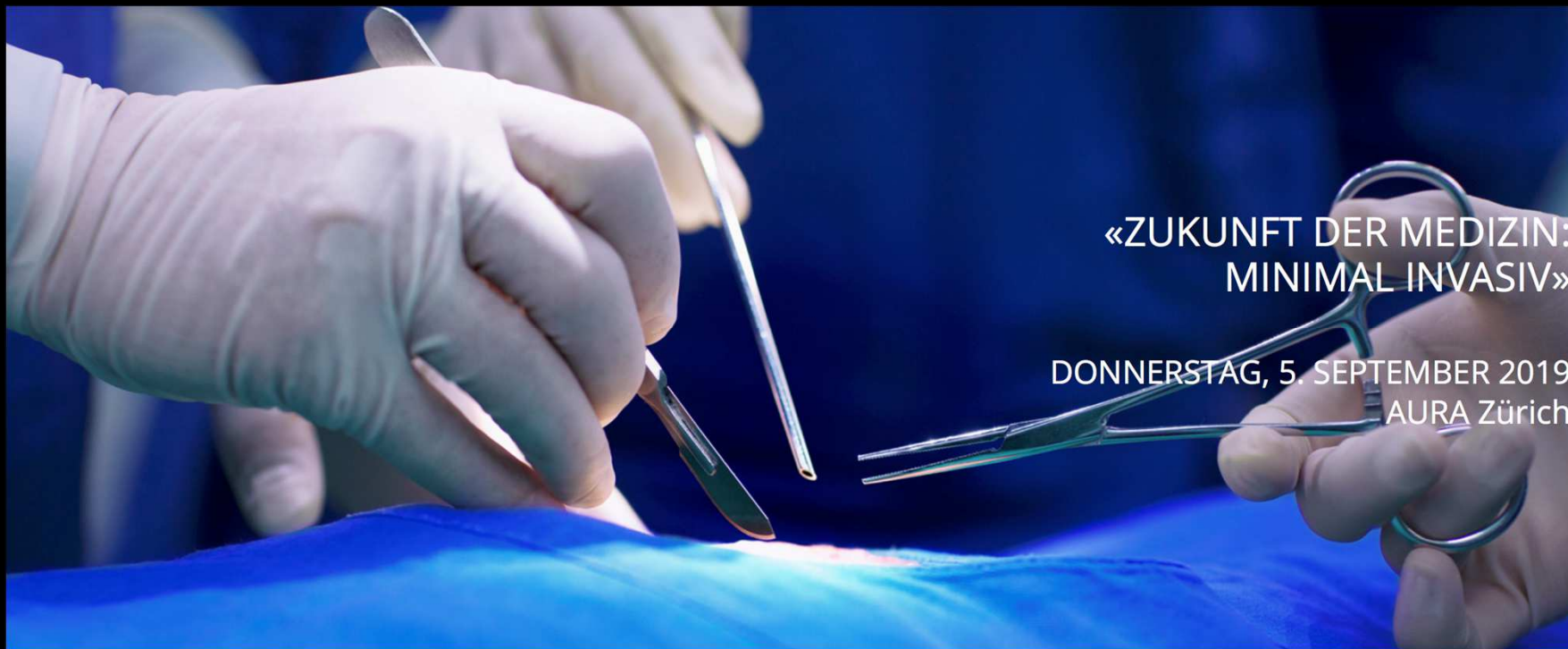
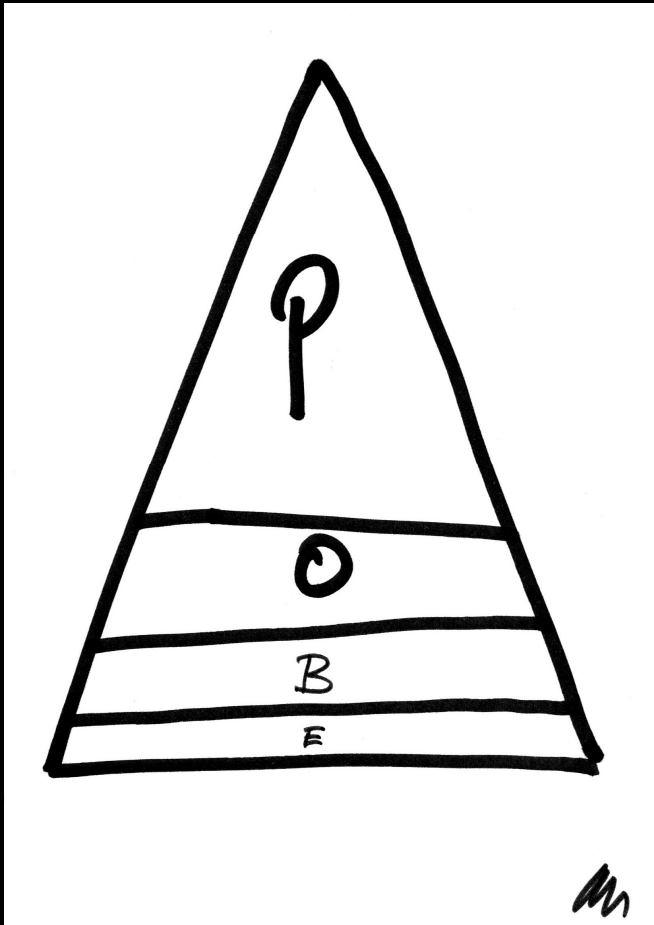


SSS 2019



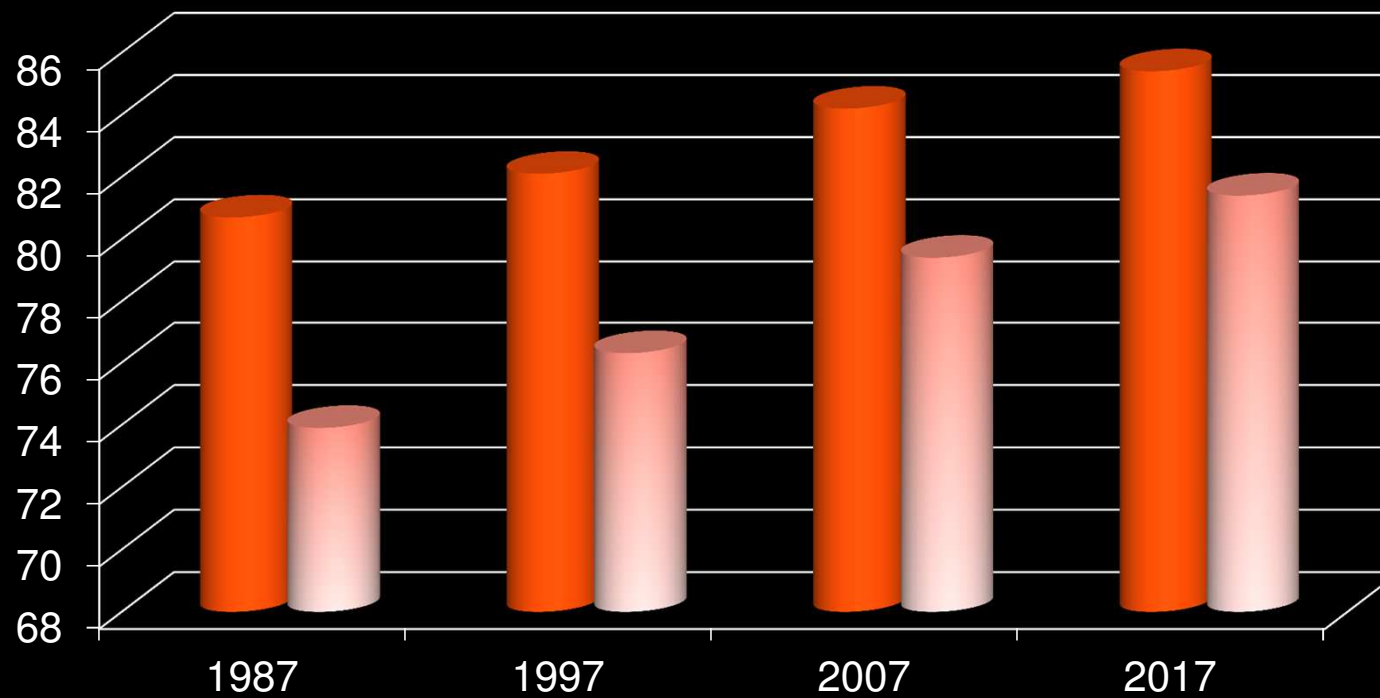


*The best interest of the patient is
the only interest to be considered*

W.F. Mayo, 1918

LIFE EXPECTANCY CH

	1987	1997	2007	2017
Frauen	80.7	82.1	84.2	85.4
Männer	73.9	76.3	79.4	81.4



bfs 2019

The Balgrist

HOW WELL DO THE SWISS FEEL?

	Total Befragte	Gut bis sehr gut %	Mittelmässig %	Schlecht bis sehr schlecht %
2017	22 122	84.7	11.8	3.5
2007	18 750	86.7	9.8	3.4
1997	13 000	83.2	12.8	4

bfs 2019

PUBLIC TRUST AND SATISFACTION WITH PHYSICIANS

Public Trust in Physicians — U.S. Medicine in International Perspective

Attitudes about Doctors, by Country.*

Country	All Things Considered, Doctors in Your Country Can Be Trusted (Strongly Agree or Agree)		Satisfaction with the Treatment You Received When You Last Visited a Doctor (Completely or Very Satisfied)	
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Blendon, RJ:
NEJM 371: 1570, 2014

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WORK DAYS LOST DUE TO SICK LEAVE

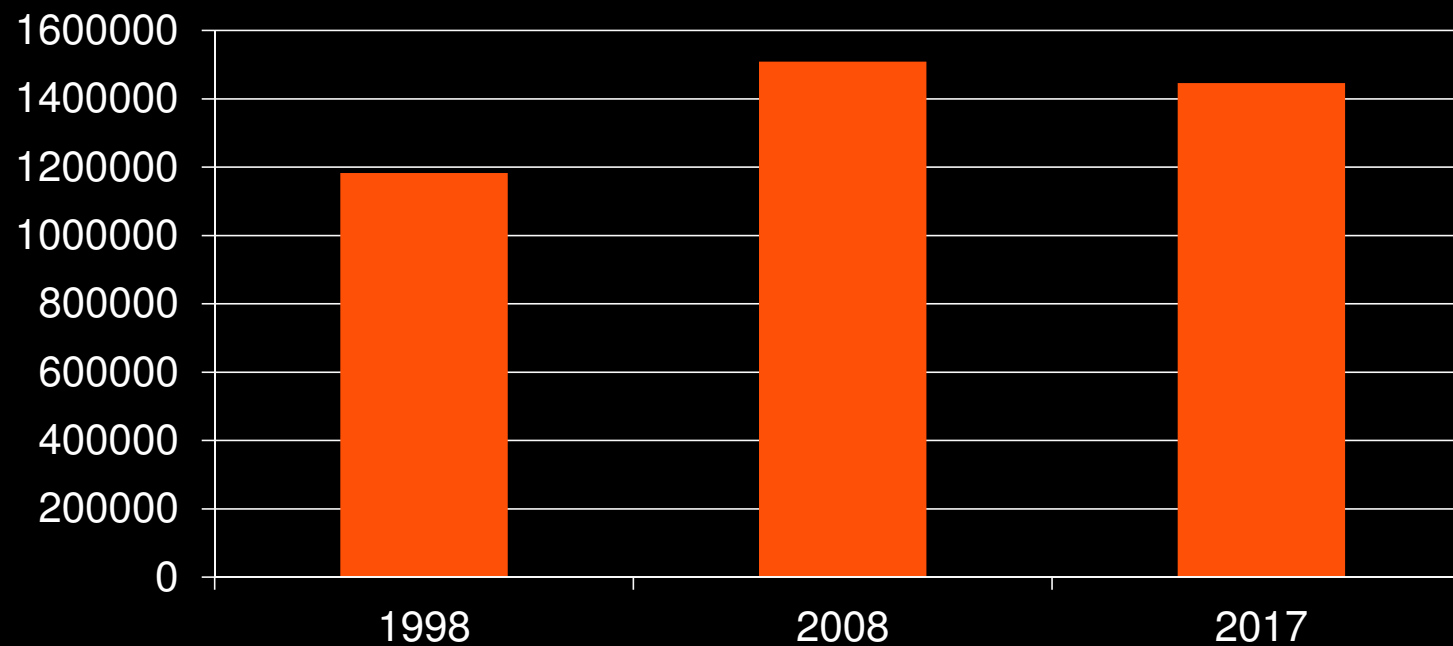
	2010	2014	2018
Frauen	9.1	9.3	9.8
Männer	8.5	7.9	8

bfs 2019

RATE OF HOSPITALIZATIONS

1998	2008	2017
1 183 285	1 508 813	1 445 967
16,6%	19,5%	17,0%

HOSPITALIZATIONS



bfs 2019

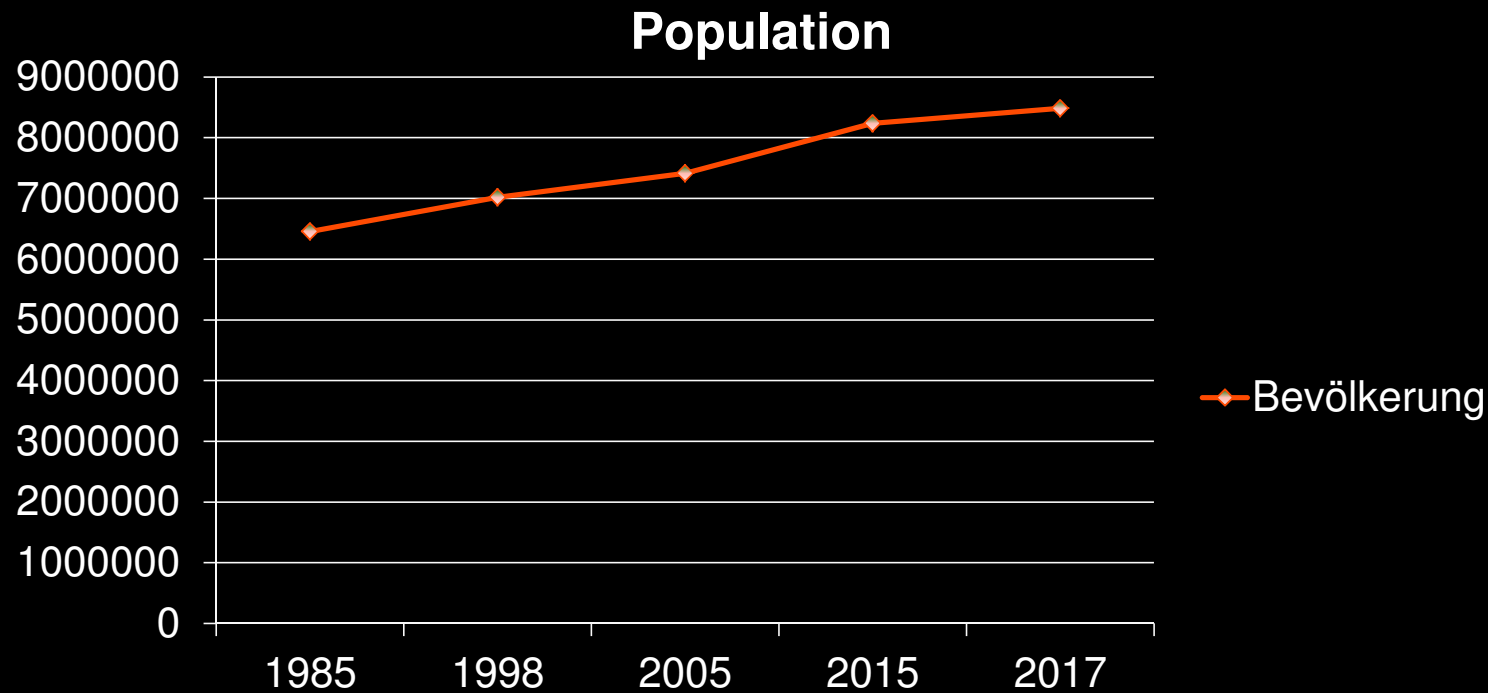
HOPITALIZATIONS CH 2013

Respiratory System	5.7%
Psychiatry	6.9%
Obstetrics	7.3%
Tumors / Oncology	8.3%
Gastro – intestinal	8.3%
Cardio Vascular	10.9%
<i>Musculoskeletal elective</i>	<i>13.2%</i>
<i>Trauma / Accidents</i>	<i>12.8%</i>

Statistisches Jahrbuch der Schweiz 2015

SWISS POPULATION

1985	1995	2005	2015	2017
6'455'896	7'019'019	7'415'102	8'237'666	8'484'130



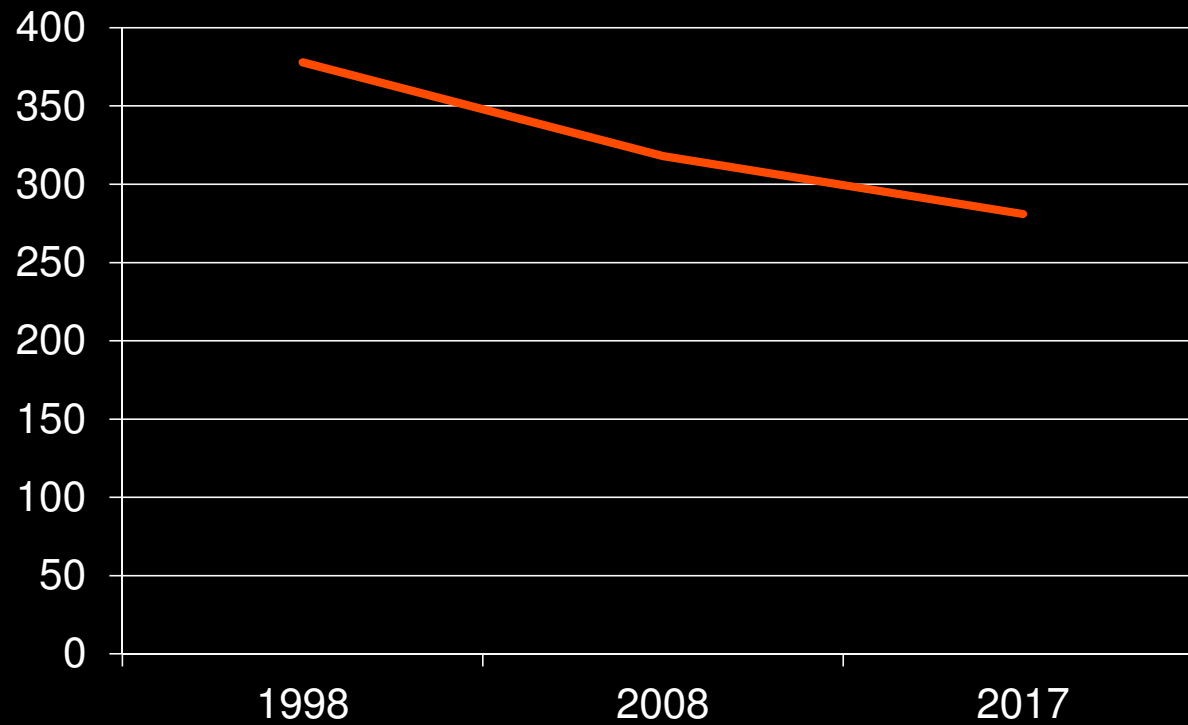
bfs 2019

The Balgrist

NUMBER OF HOSPITALS CH

1998	2008	2017
378	318	281

NR OF HOSPITALS CH

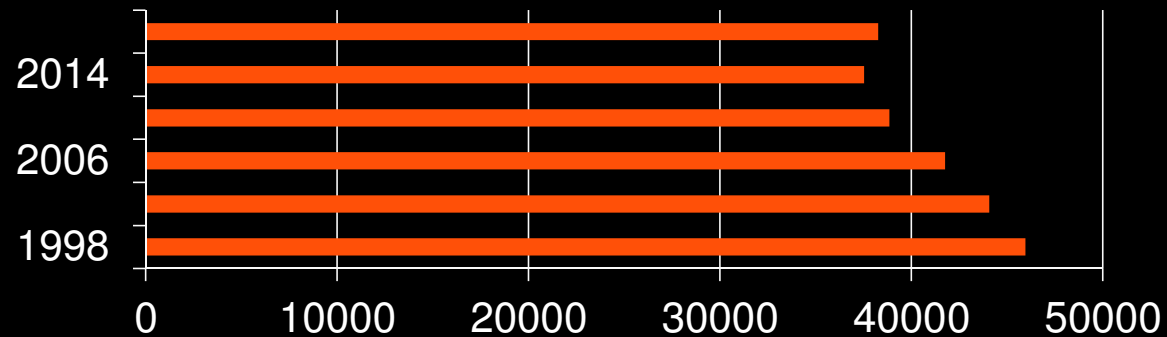


bfs 2019

HOSPITAL BEDS SWITZERLAND

1998	2002	2006	2010	2014	2017
45'959	44'073	41'769	38'852	37'540	38'263
6.5 b/1000 inh					4.5 b/1000 inh

Hospital beds

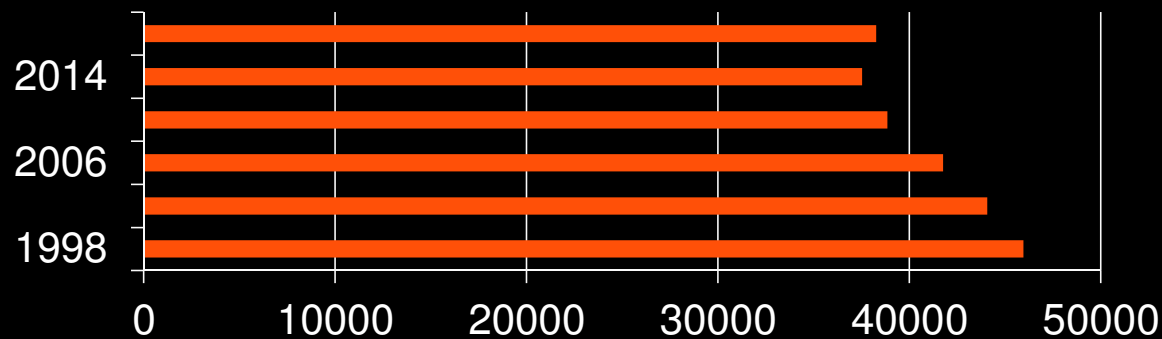


bfs 2019

MEAN LENGTH OF HOSPITAL STAY

1998	2002	2006	2010	2014	2017
45'959	44'073	41'769	38'852	37'540	38'263
6.5 b/1000 inh					4.5 b/1000 inh

Hospital beds



2000	2005	2010	2015	2017
7.3d	6.7	6.0	5.5	5.3

bfs 2019

BALGRIST UNIVERSITY HOPITAL 1996 AND 2016

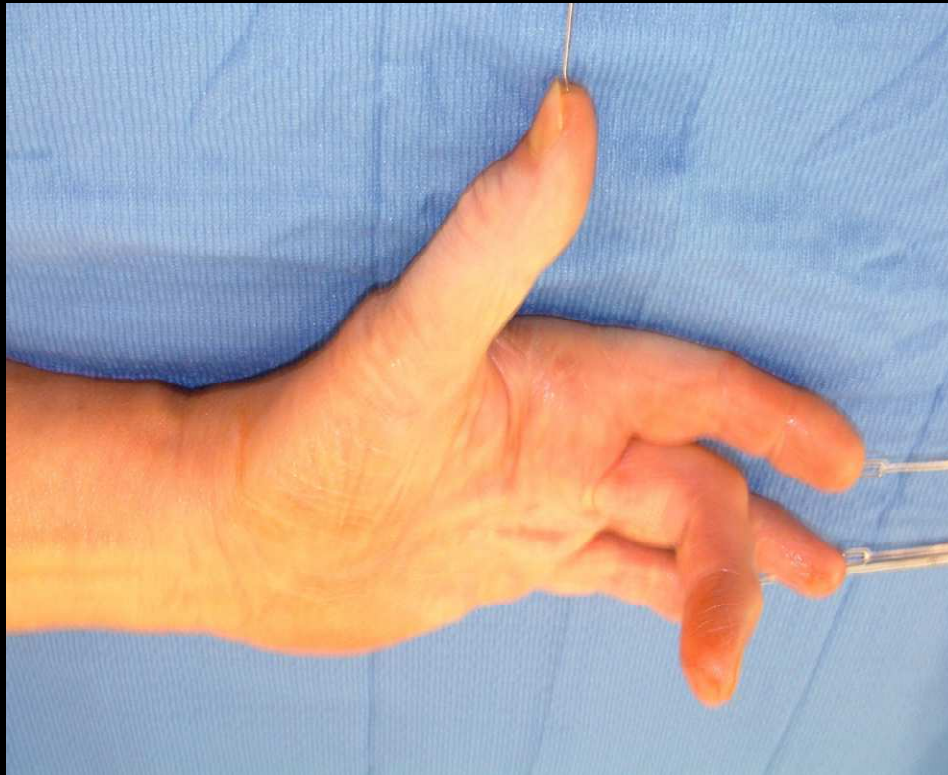
	1996	2016	%(1996)
Operations	2'706	5'293	+ 96
Discharged patients	2'909	5'154	+ 77
Hospital Beds	161		
Length of stay	13.2	6.0	- 55
Consultations	26'177	71'924	+ 174
Employees	600	901	+ 50

Mean length of stay - 55% !
In same infrastructure, medical services > doubled
Increase in consultations >> Increase in number of operations
Employees +50%, medical services +125%

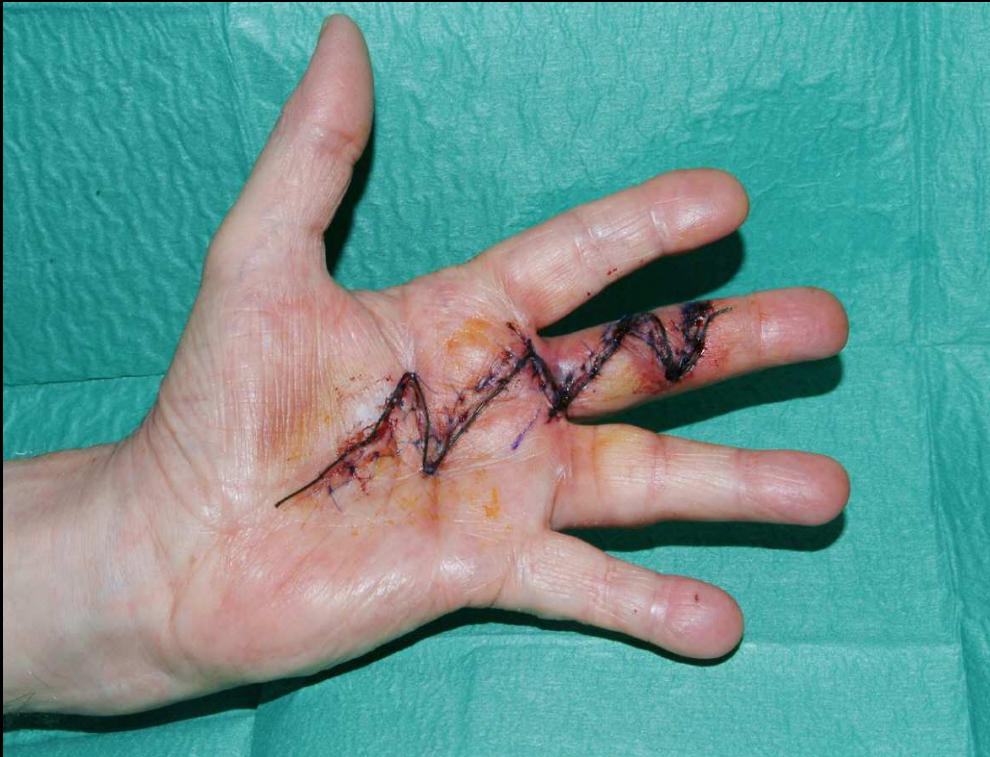
HAND: DUPUYTREN'S DISEASE



HAND: DUPUYTREN'S DISEASE



INFRASTRUCTURE



REIMBURSEMENT AMBULATORY SURGERY TARMED (CHF)

	AL (CHF)	TL (CHF)	Total
Dupuytren (moderate)	189	234	443
Arthroscopy shoulder	316	290	606
Carpal tunnel release	97	105	202
Arthroscopy knee	187	158	345



BEDS EMPTY

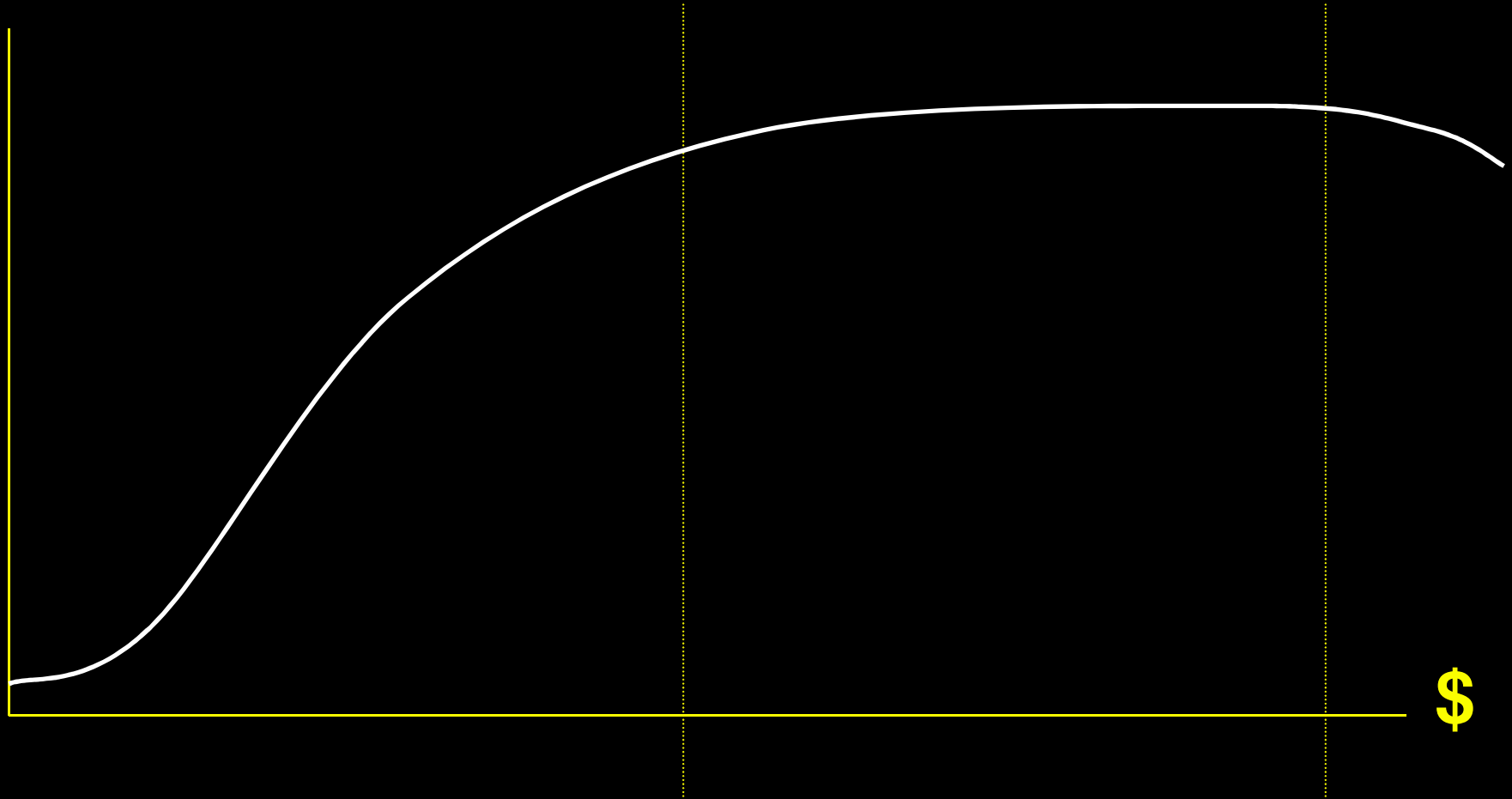






HEALTH CARE EXPENDITURES AND HEALTH

Health





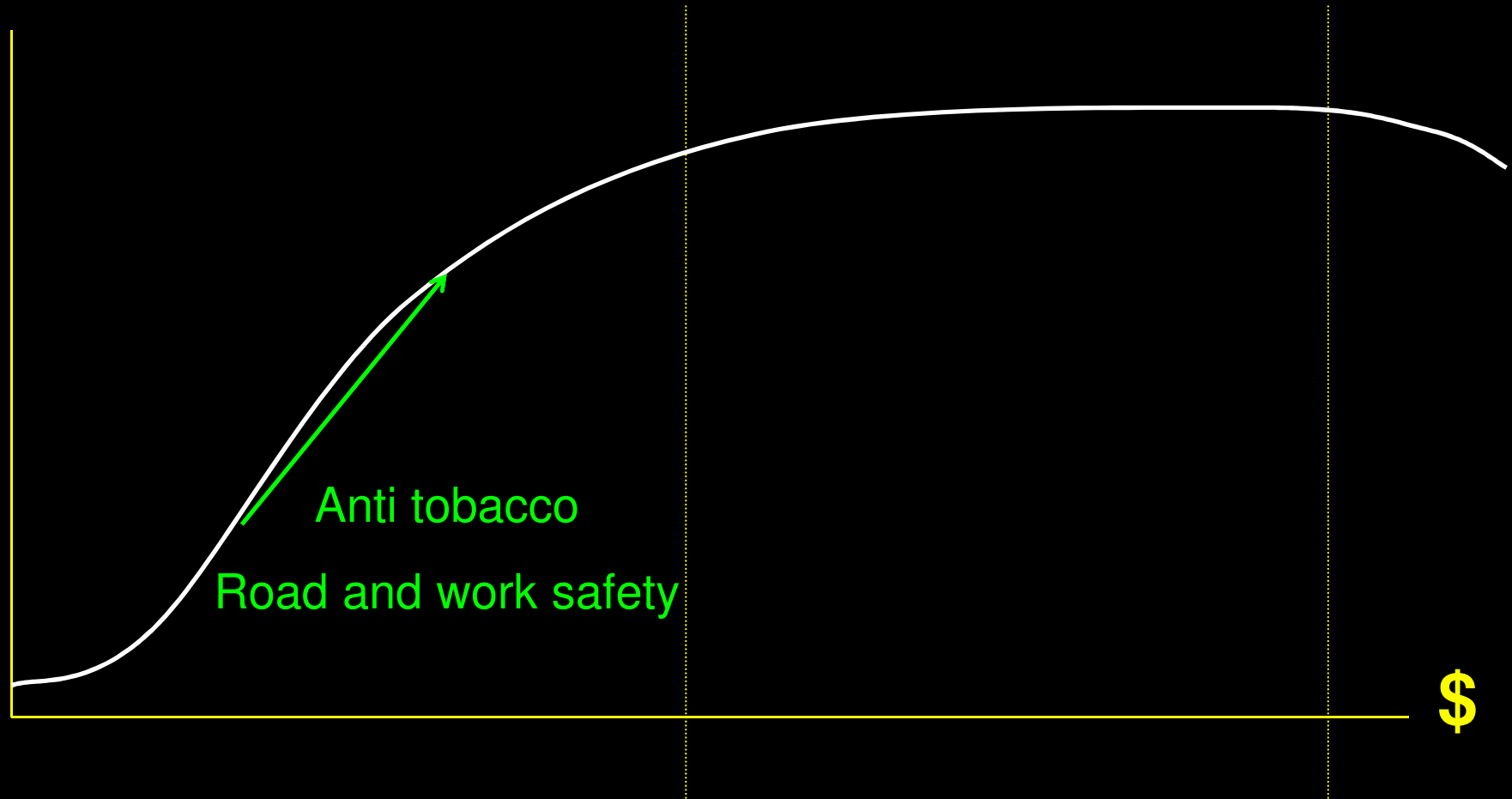
Principles are fundamental truths.

*Whether you understand them or
you even agree,
They still apply*

Stephen R. Covey

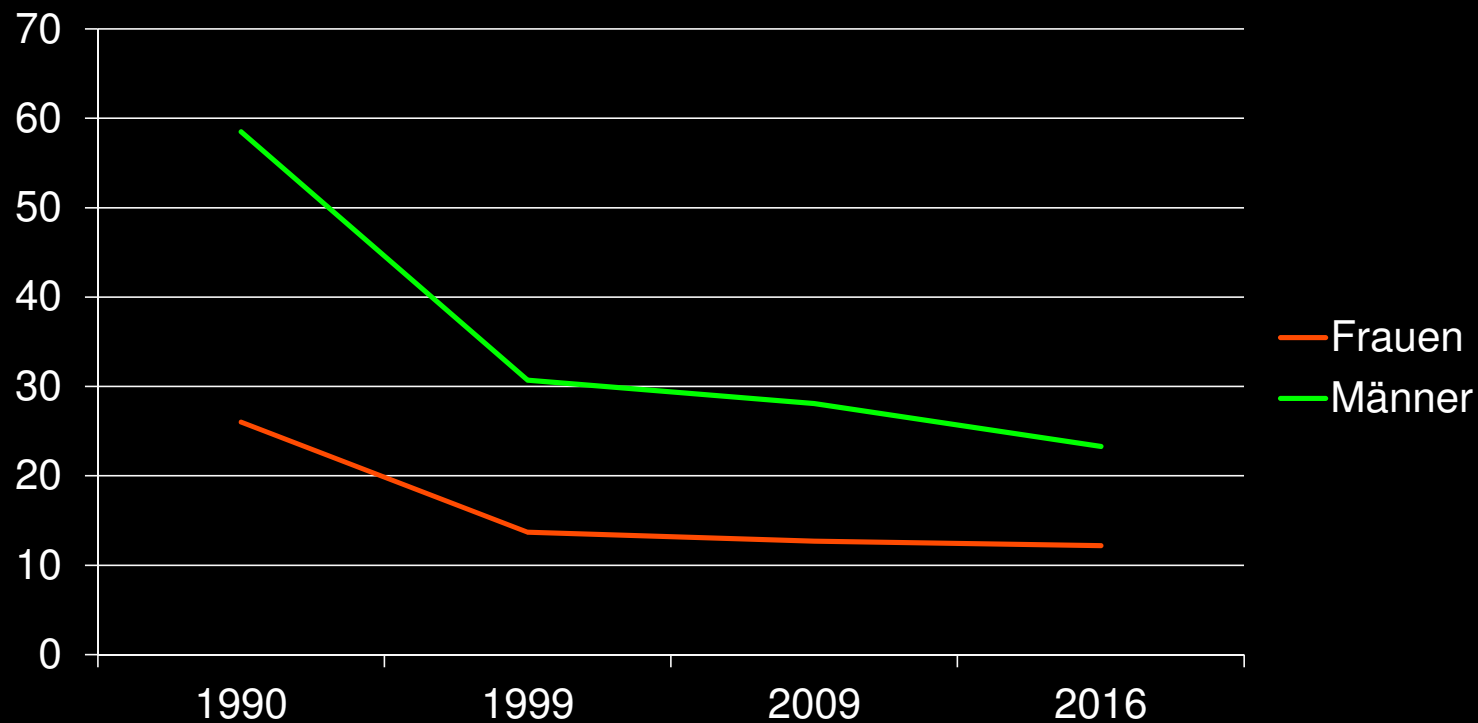
HEALTH CARE EXPENDITURES AND HEALTH

Health



ACCIDENT DEATHS/ 100'000

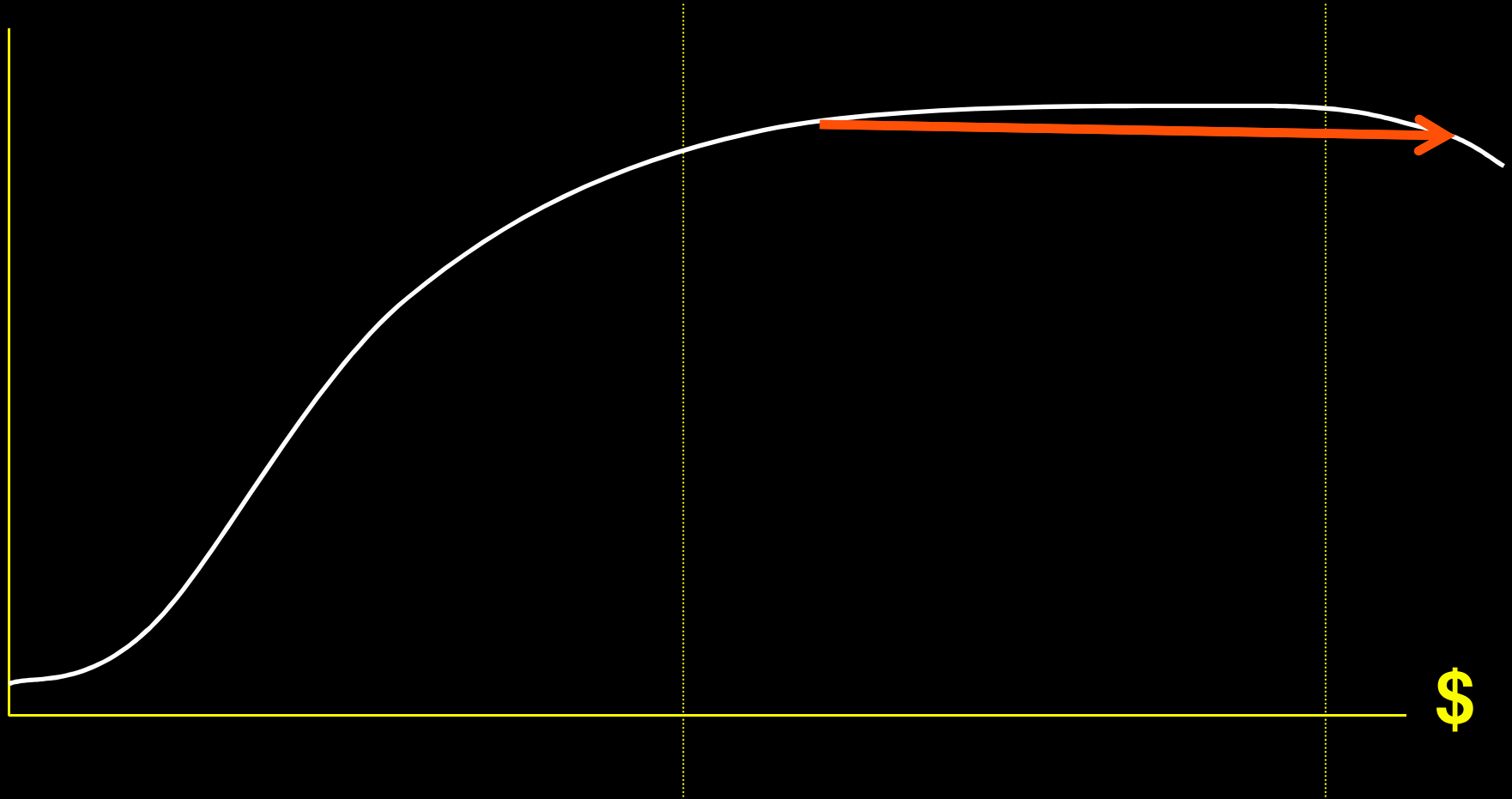
	1990	1999	2009	2016
Frauen	26	13.7	12.7	12.2
Männer	58.5	30.7	28.1	23.3



bfs 2019

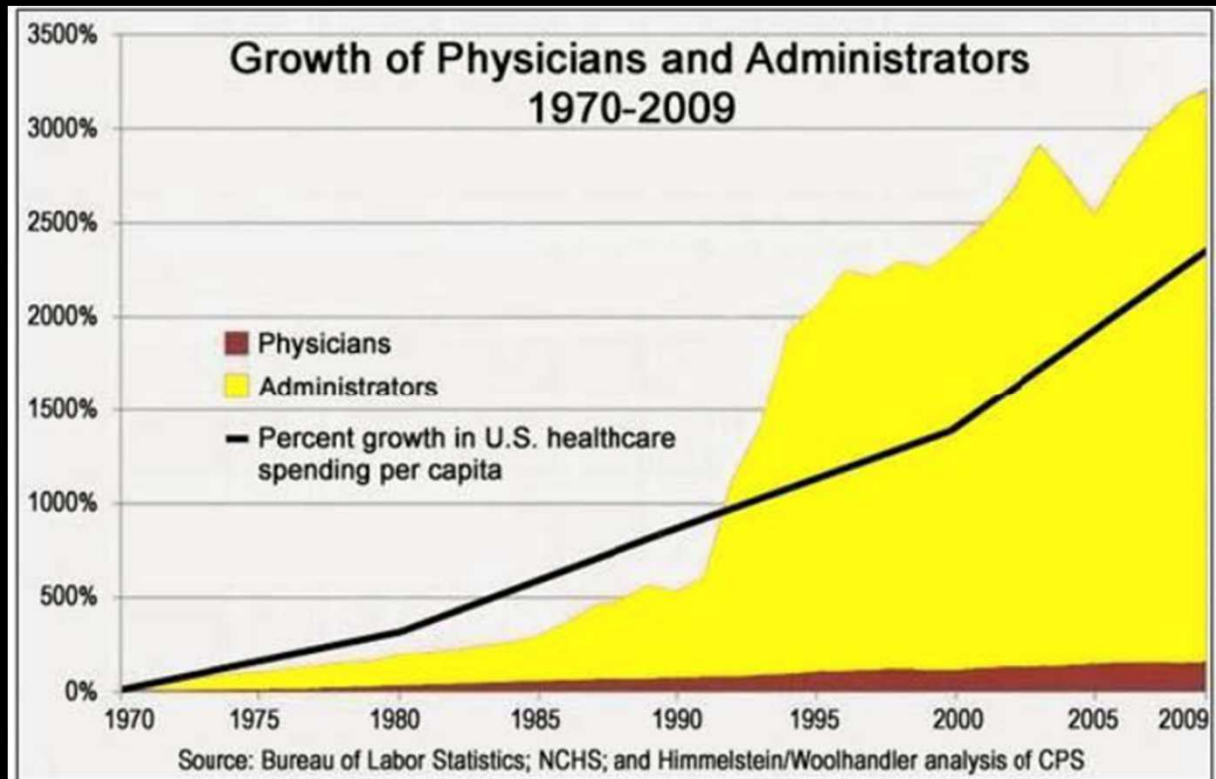
HEALTH CARE EXPENDITURES AND HEALTH

Health



\$

GROWTH OF MEDICAL PERSONNEL



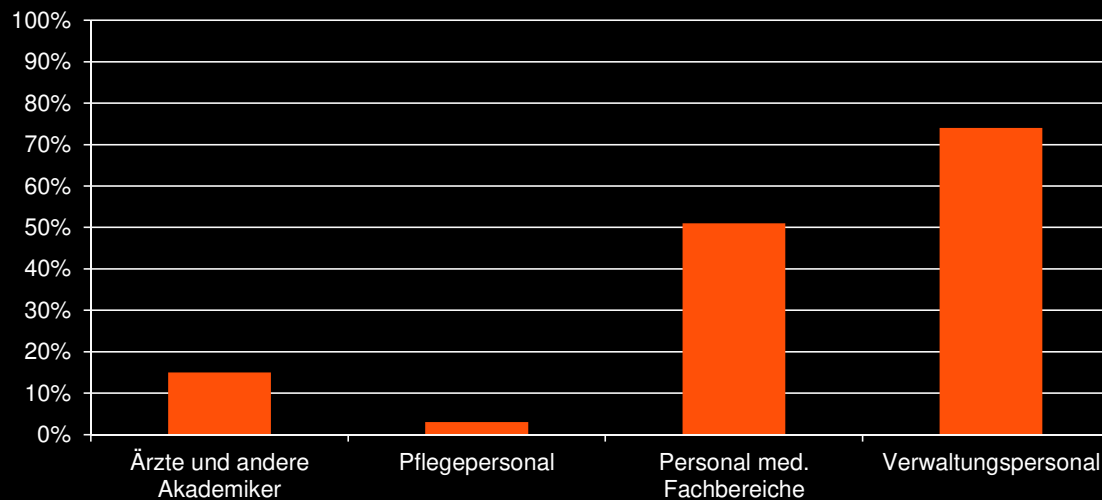
Bureau of Labor Statistics National Center of Health
Statistics, Center for Disease Control, CPS

HOSPITAL EMPLOYMENT BALGRIST UNIVERSITY HOSPITAL

	2016	2015	2010	2007
Physicians / Academicians		100	86	87
Nursing		160	145	155
Med Tech Personnel		284	208	188
Administration		59	40	34

Δ 2007-2016
15%
3%
51%
74%

Δ 2007-2016



DRG CODING SWITZERLAND

Simple case: 15 min
Difficult case: 50 min
Complex case: 180 min

CH Hospitals:

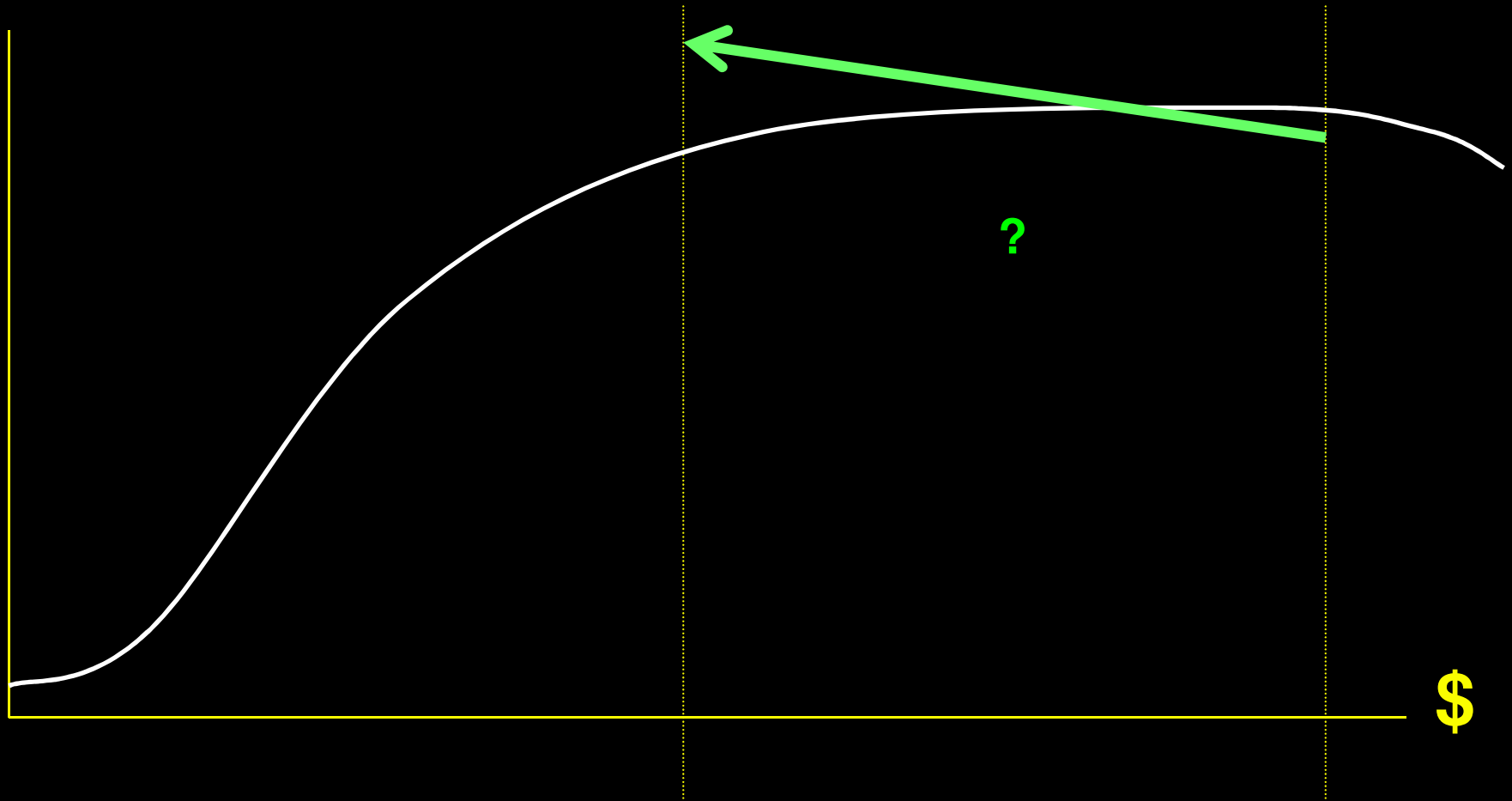
Acute Cases n= 1,184 Mio
FTE needed: n= 423

Cost for coding (without billing) : 71,91 Mio CHF

Quelle: H. Locher , Kodieraufwand DRGs, Juli 2016

HEALTH CARE EXPENDITURES AND HEALTH

Health



\$

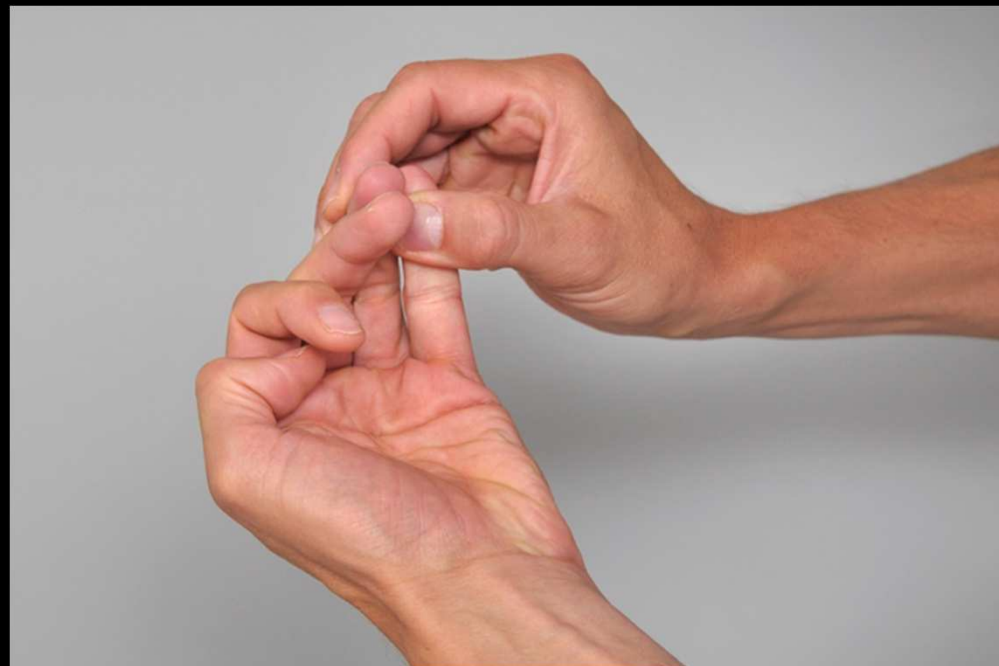
2019





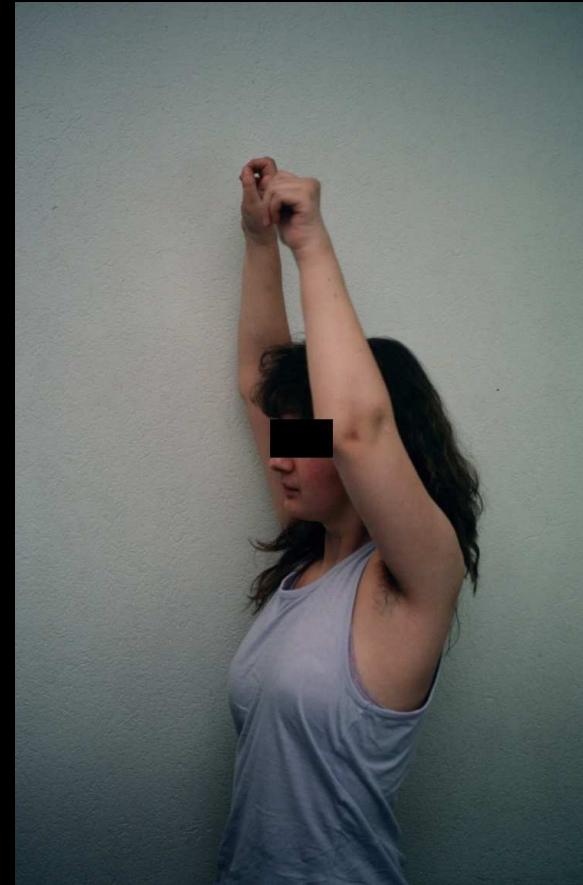
Courtesy: Prof. A. Schweizer, Balgrist University Hospital

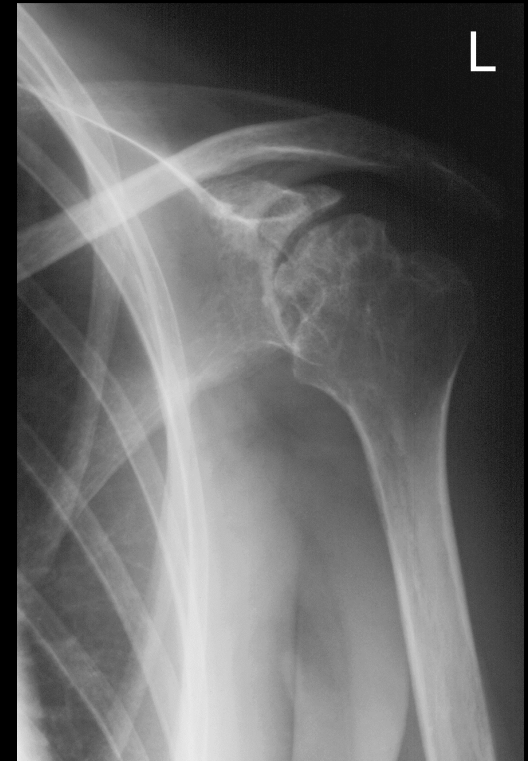
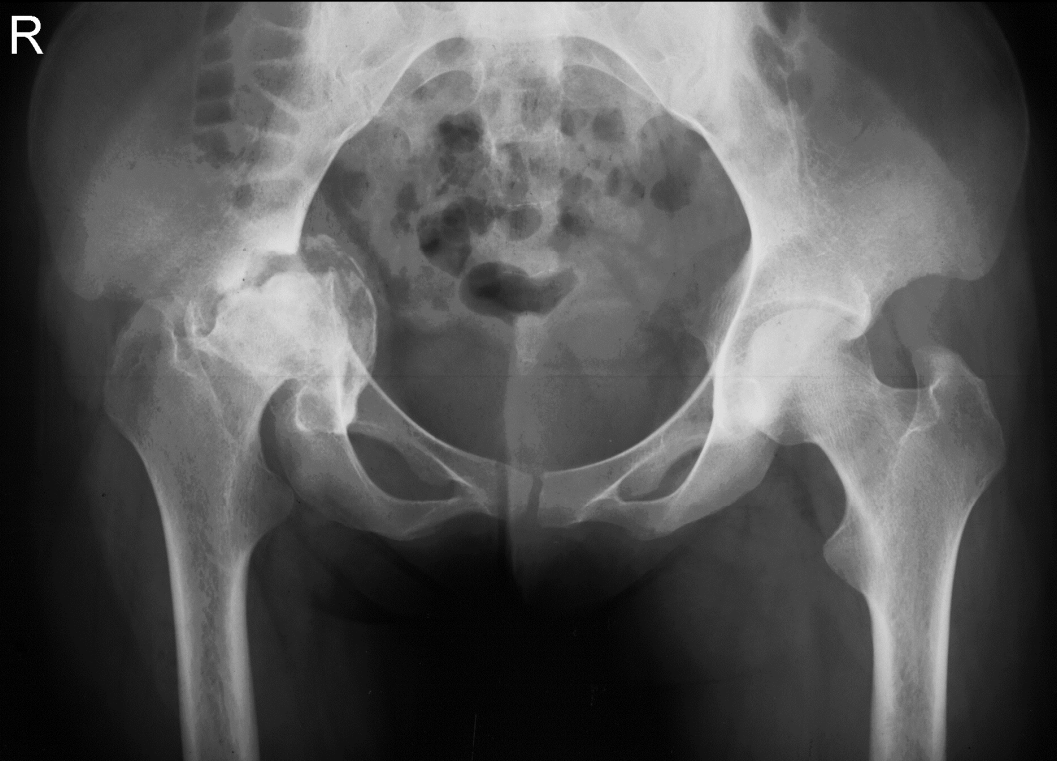
AUTO - REHAB

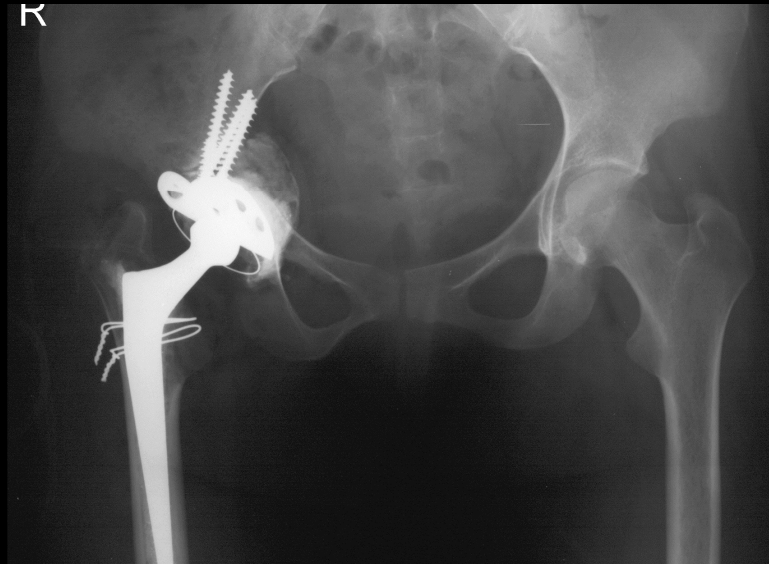
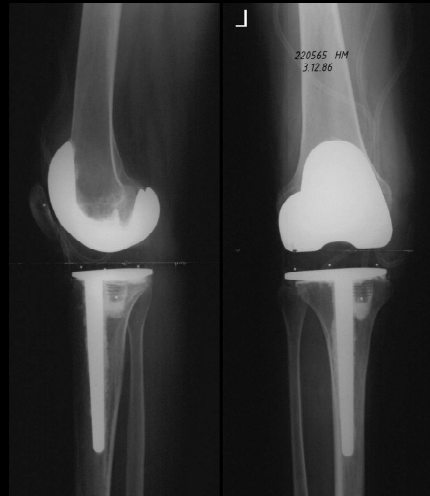
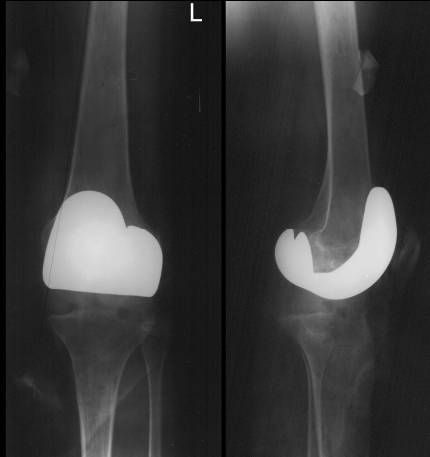


2019









RHEUMATOID ARTHRITIS

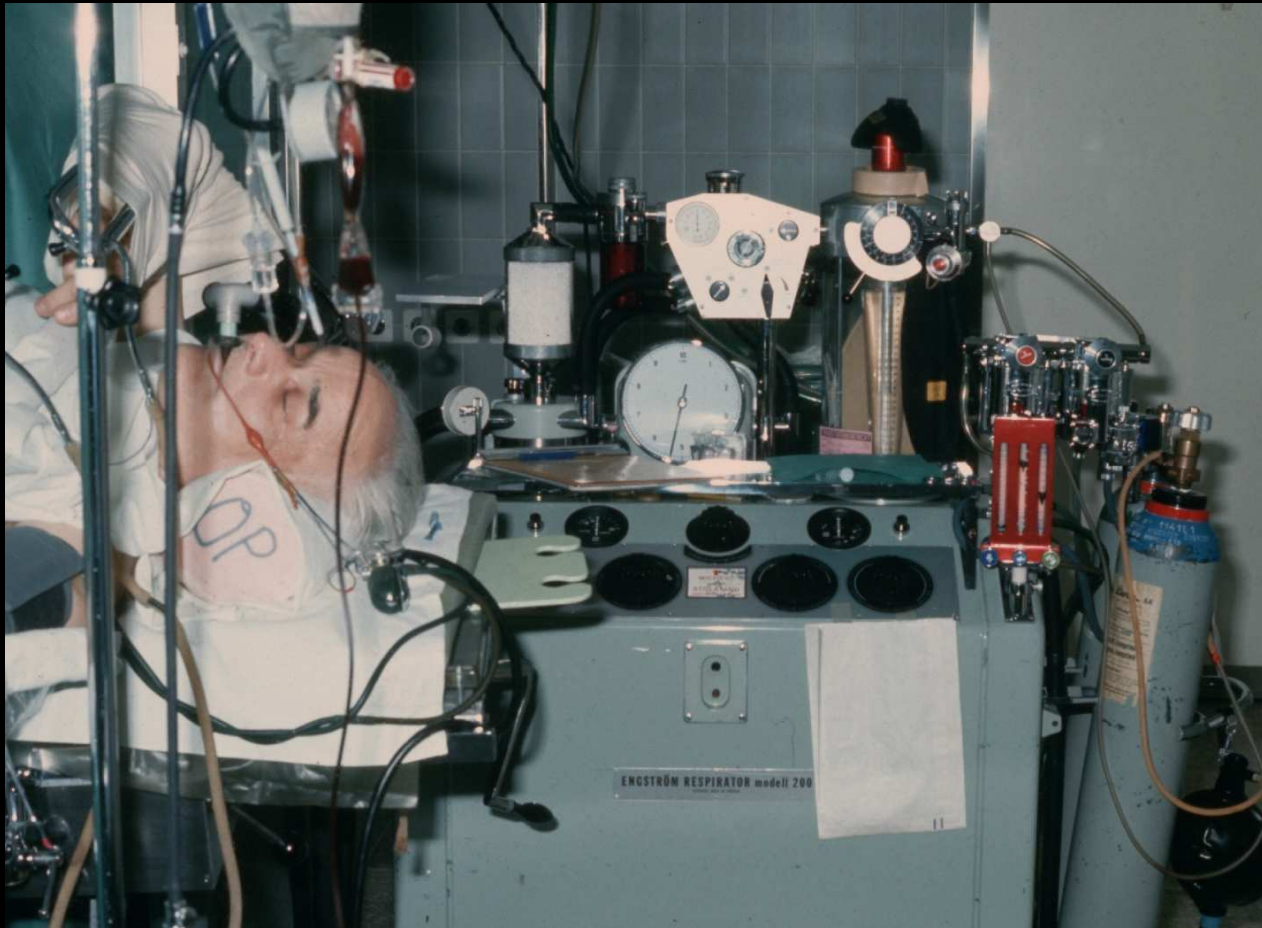


Anti TNF- α , Anti IL-6





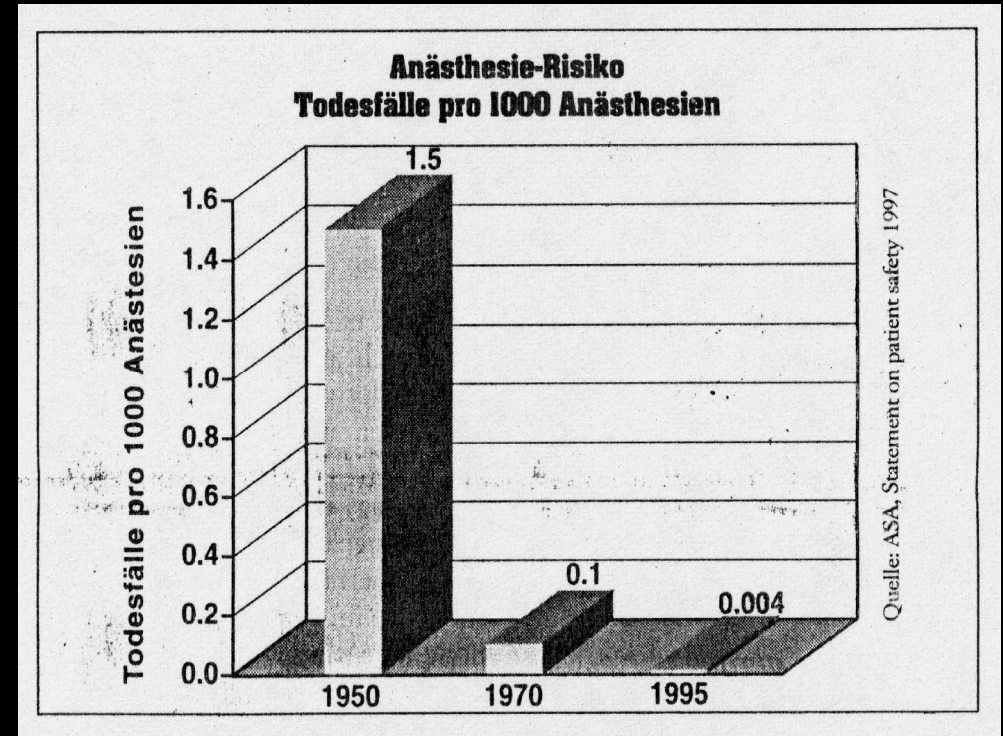
BALGRIST 1995



ANESTHESIOLOGY HAS ALLOWED REVOLUTIONS FOR LESS INVASIVE TREATMENT OF PATIENTS



ANESTHESIOLOGY HAS ALLOWED REVOLUTIONS FOR LESS INVASIVE TREATMENT OF PATIENTS



BEDS EMPTY



HOSPITALS STILL NEEDED?



IS MINI INVASIVE MEDICINE NEW?



TUBERCULOSIS

Tuberculosis bacterium
R. Koch 1882

Vaccination
A. Calmette,
C. Guérin 1921- 24

Streptomycin
S.A. Waksman, 1943

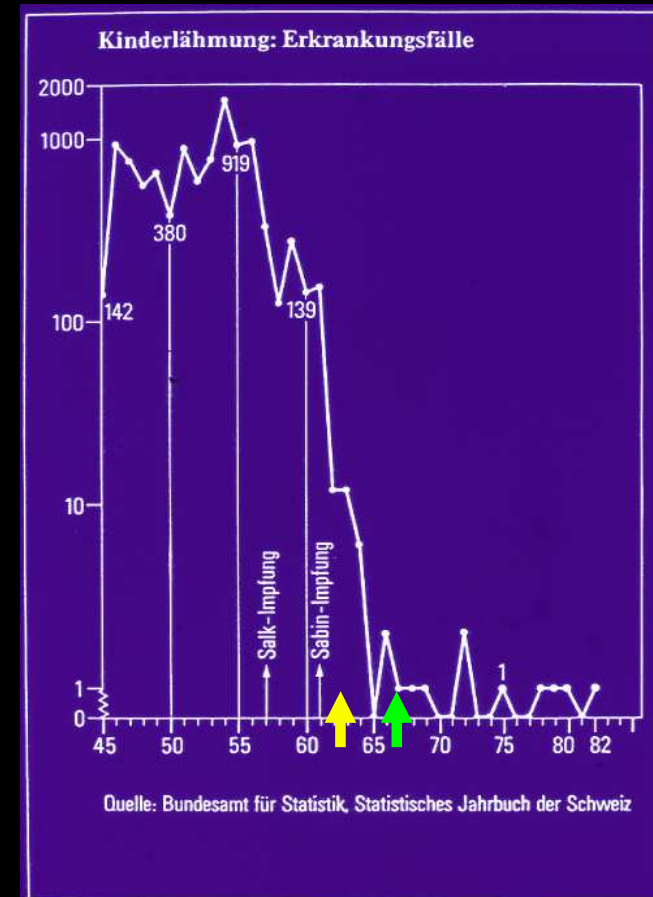


POLIOMYELITIS

Poliomyelitis virus
Landsteiner, Popper
1908

Vaccination
Salk
1955

Oral vaccination
Sabin
1962



VACCINATION





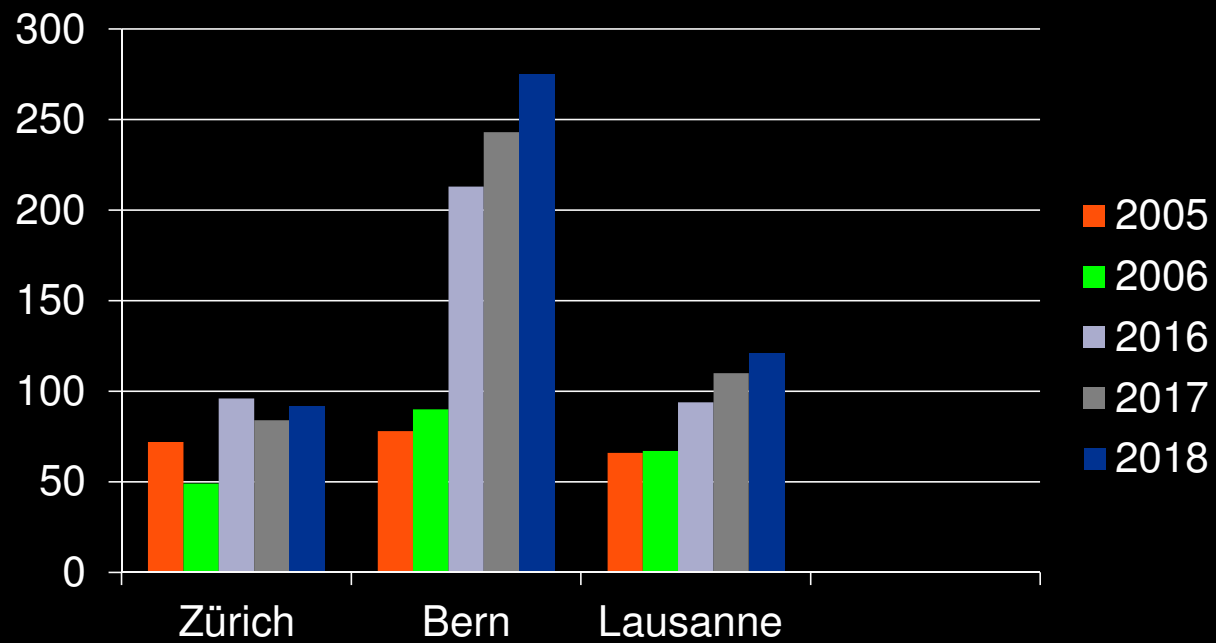


CENTRALIZATION



AIR RESCUE OF LIFE THREATENING INJURIES (REGA)

	2005	2006	2016	2017	2018
Zürich	72	49	96	84	92
Bern	78	90	243	275	230
Lausanne	66	67	94	110	121



WHAT WHEN WE DO NO LONGER TREAT JOINT PAIN WITH METAL AND PLASTIC?



BIG MEDICAL CENTERS

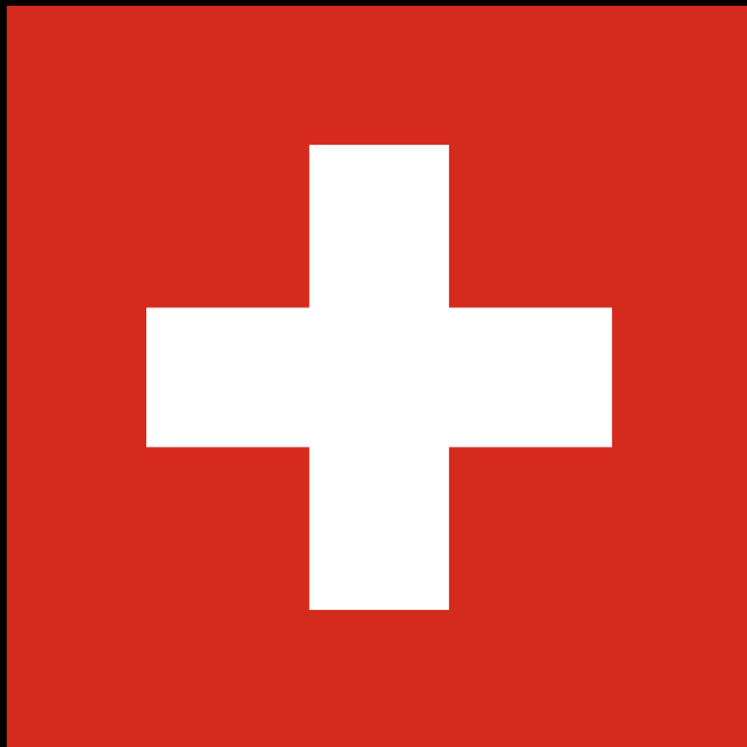


BIG MEDICAL CENTERS?



Total CHF

Dupuytren (moderate)	443
Arthroscopy shoulder	606
Carpal tunnel release	202
Arthroscopy knee	345



In patients:

Canton	55%
Health insurance	45%

Outpatients:

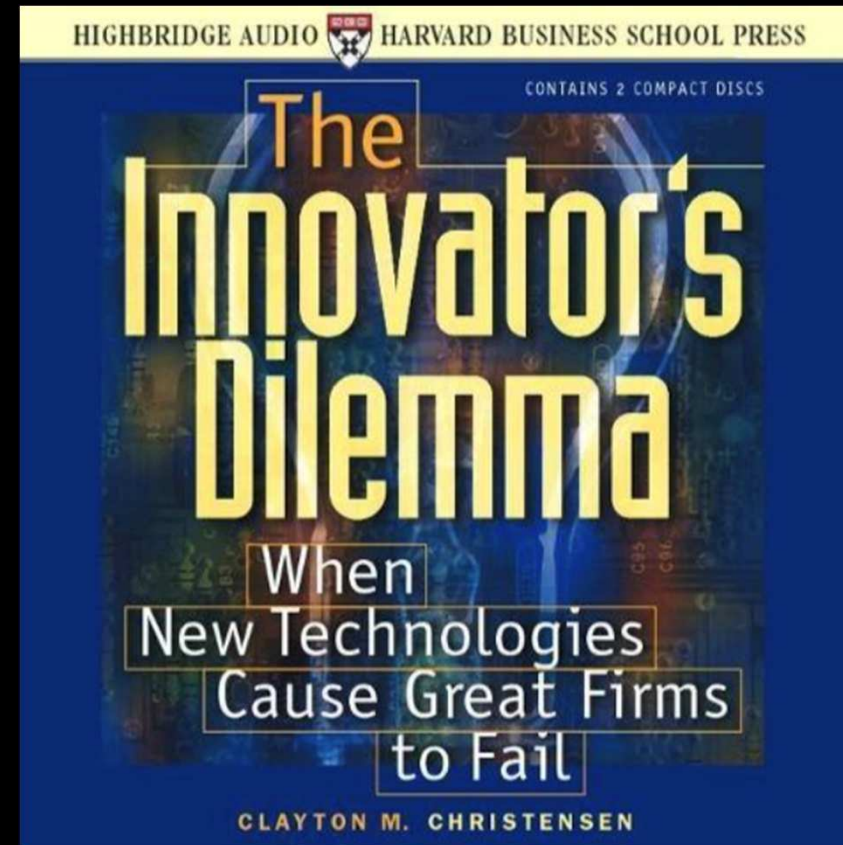
Canton	00%
Health insurance	> 90%







MINIMALLY INVASIVE MEDICINE IS STRUCTURALLY DISRUPTIVE



Clayton M. Christensen; Harvard

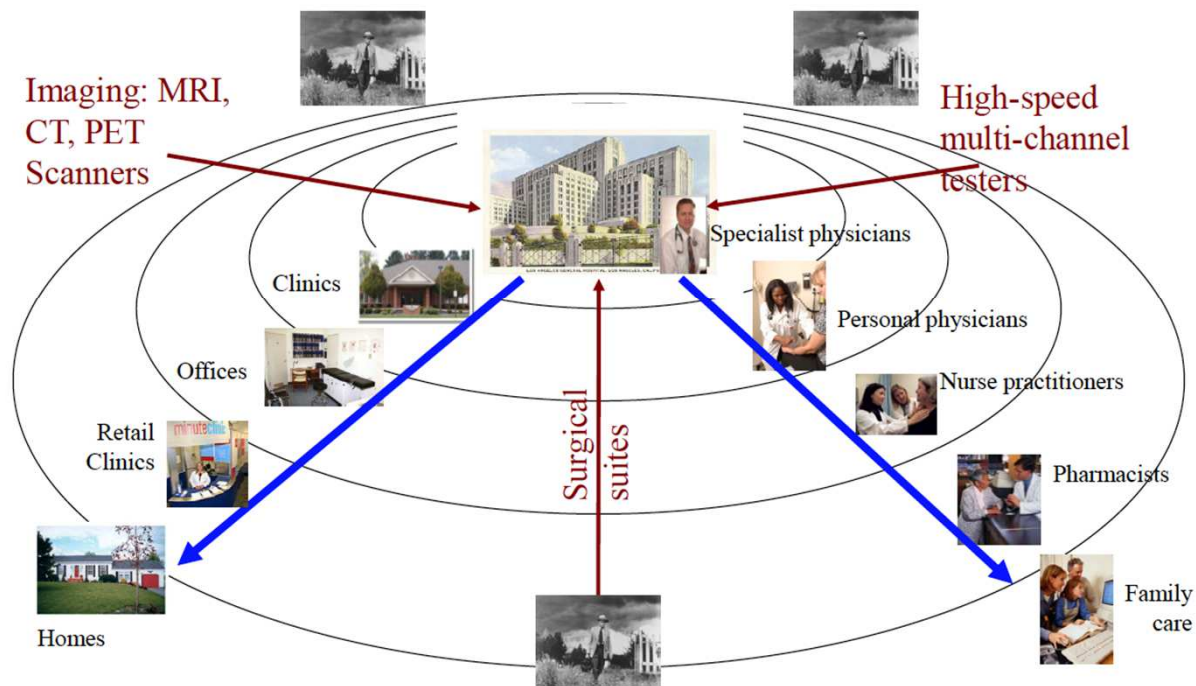
“A disruptive innovation is... a product [or] service... that... is unattractive to the established leaders in an industry.”

—Clayton Christensen



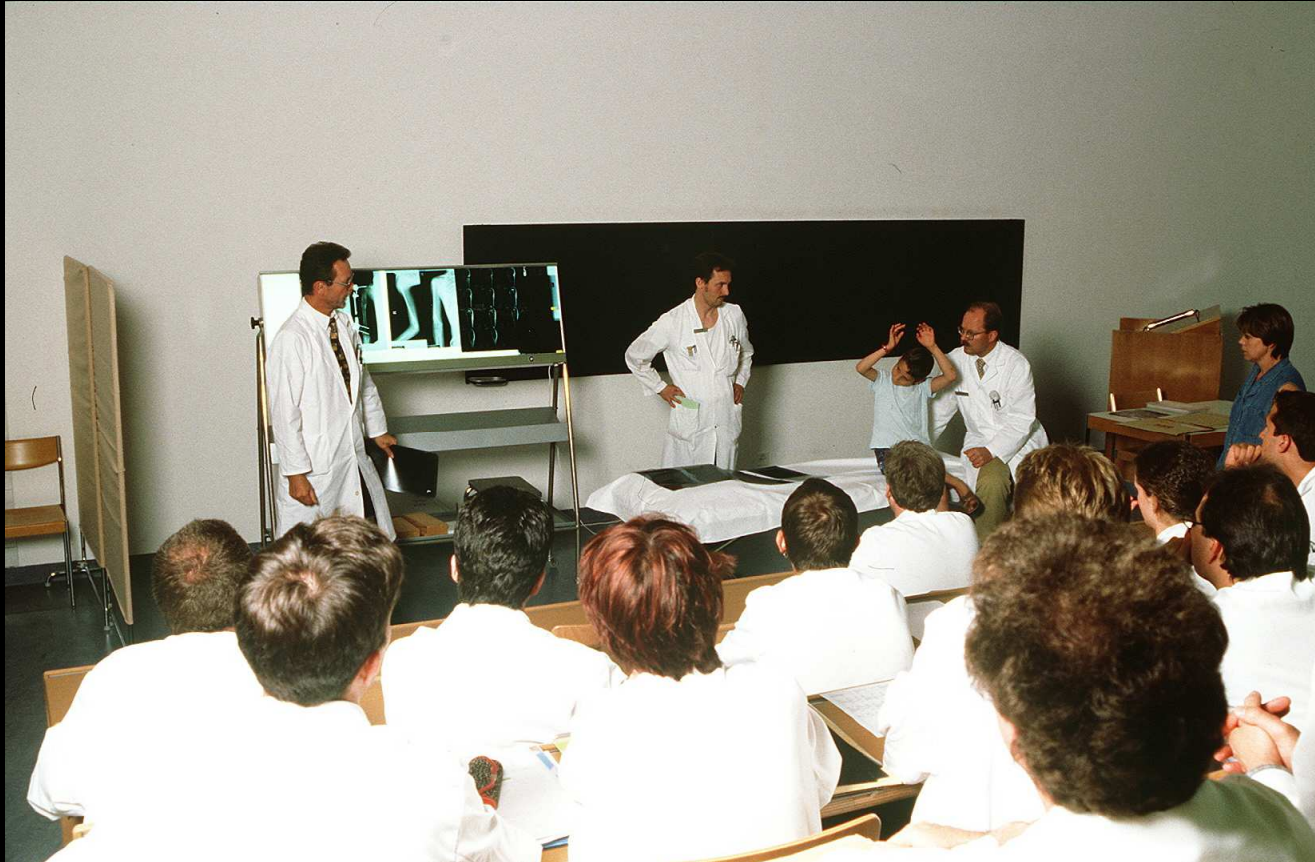
PRODUCTIVE PARANOIA URGENTLY NEEDED!

The decentralization that follows centralization is only beginning in healthcare

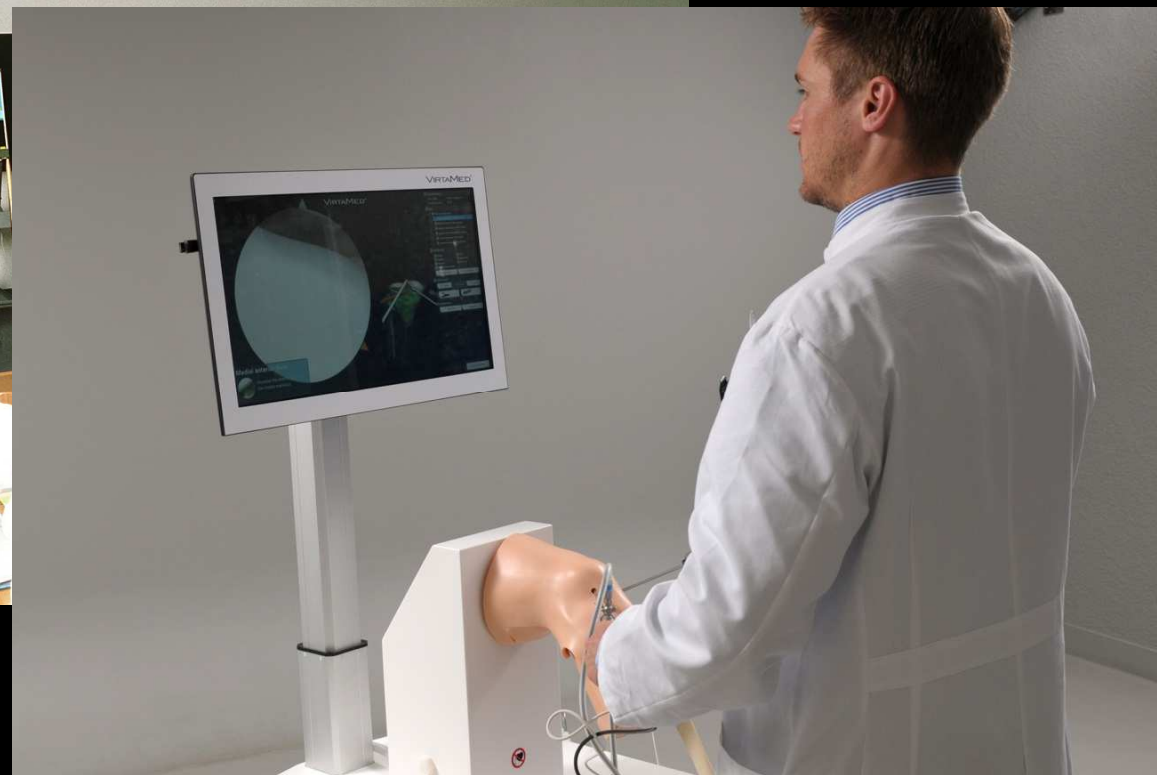


Christiansen 2015, HBS

HOW WILL WE TEACH PATIENT CARE?



HOW WILL WE TEACH PATIENT CARE?



A man with short brown hair, wearing a white dress shirt and a yellow tie, is shown from the chest up. He is gesturing with both hands raised, palms facing forward, as if speaking or explaining a concept. The background is dark and out of focus.

**Large companies typically fail at
disruptive innovation
because the top management team is
dominated by individuals who have been
selected for delivery skills,
not discovery skills.**

In The Innovator's DNA
By Clayton M. Christensen

CONCLUSIONS

1. **Minimally invasive concepts will prevail**
2. **Minimally invasive medicine is structurally disruptive**
3. **Centralization will be followed by decentralization**
 1. Centralization for the sustainable indications not achieved
 2. Decentralization inevitable, game changer, blind spot
4. **We have *too many* hospital beds for the future:**
 1. Reimbursement system responsible for preventing progress and cost containment; it has to be changed to mirror medical evolution

CONCLUSIONS

- 5. The administrative cost of patient care has to be addressed as a top priority.**
- 6. The Cantons have to stop or to be stopped to delegate health care financing to the patients and health insurers**

PUBLIC TRUST AND SATISFACTION WITH PHYSICIANS

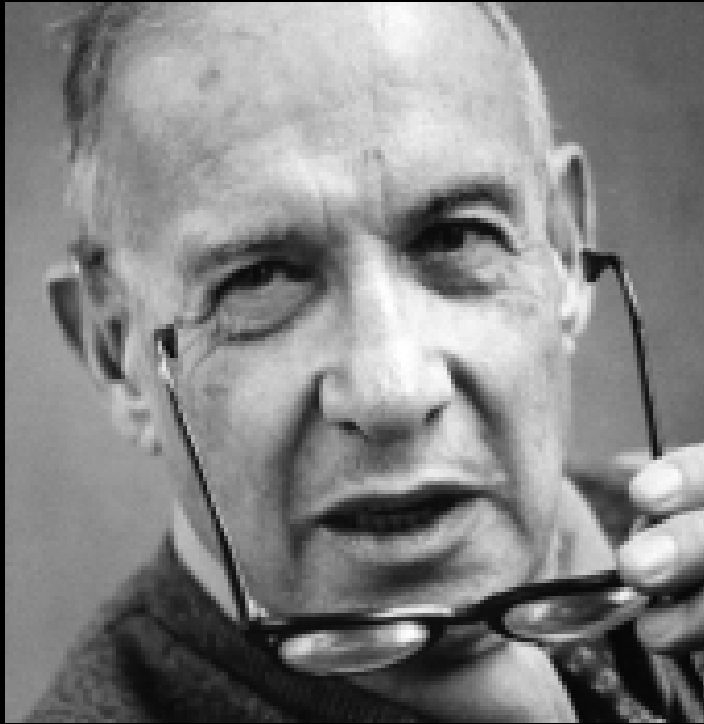
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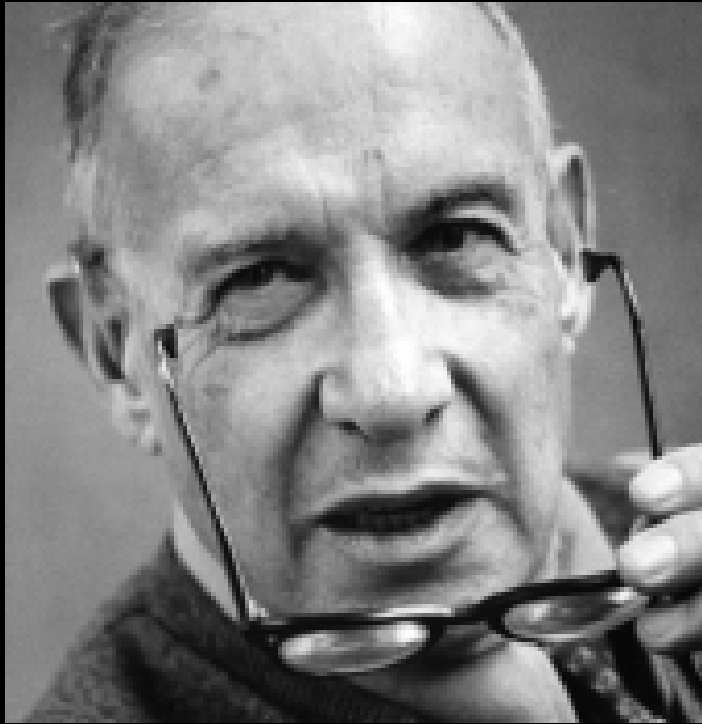
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**Blendon, RJ:
NEJM 371: 1570, 2014**





*Management
is doing things right*



*Management
is doing things right*

*Leadership
is doing the right things*

Peter Drucker