

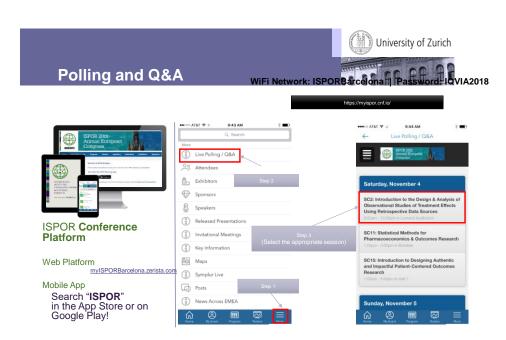
# What Does Patient-centered Care Mean for Medicine in the Welfare States of Europe?

### **ISPOR Panel**

Barcelona, 12 November 2018

by

Peter Zweifel, peter.zweifel@uzh.ch



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## Polling Question #1



Do you believe that patient-centered medicine will increase or decrease health expenditures?

- A. Increase
- B. Decrease
- C. No discernable effect



Poll: Do you believe that patient-centered medicine will increase or decrease health expenditures?

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## Polling Question #2



If increase, how should additional expenditures for patient-centered care be financed?

- a. Increase in taxes
- b. Increase patient cost sharing
- c. Other
- d. Not applicable. I believe patient-centered care will reduce expenditures

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Poll: If increase, how should additional expenditures for patient-centered care be financed?

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### 1 The promise of patientcentered medicine



- Patient-centered medicine corresponds to what is standard outside the healthcare sector
- There, suppliers of goods and services compete for consumers
- Failure to be consumer-centered results in losses (recall Ford's Edsel car?)
- In health care, current and potential patients (and not insurers or governments!) are the ultimate financiers
- They pay contributions, taxes, and out-of pocket copayments
- Under patient-centered medicine, they would (finally) obtain what they pay for, according to their **preferences**

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### 2 Cost: the downside of patientcentered medicine I



- Patient-centered medicine will cause another increase in healthcare expenditure (HCE), and for two reasons
- (1) It is an innovation that elicits higher willingness to pay, which ultimately transpires in higher fees and HCE
- (2) As a product differentiation, it causes a decrease in 'lot size'
- In industry, product differentiation goes along with smaller lot sizes
- In **health care**, this is true for the pharmaceutical industry in the guise of 'personalized medicine'
- R&D expenditure has to be distributed over fewer units
- Unit cost goes up

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### 2 Cost: The downside of patientcentered medicine II



- However, patient-centered medicine causes another increase in unit cost
- A physician who wants to tailor treatment to a particular patient takes more (costly!) time
- Information technology might in principle counteract this
- But: Physicians dislike 'being told what to do' by a decision tree
- Patient-centered medicine is viewed as a challenge by health insurers and governments

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## What Does Patient-centered Care Mean for Medicine in the Welfare States of Europe?

### A response to Peter Zweifel

Adrian Towse Director of the Office of Health Economics and Visiting Professor, London School of Economics

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Research

### Rebuttal Part 1

- Patient centredness yes, but also 3<sup>rd</sup> party insurance. Payer decides what is available. Patient has to top up if they want
- Will premiums need to go up if there is full coverage?
- Higher patient preference because ...?
  - Additional value of patient knowledge that the treatment will work? "Value of knowing? 1"
- Lower volumes, so cost per unit goes up?
  - Original Danzon and Towse<sup>2</sup> argument was that health gain was concentrated in fewer patients, prices higher but revenues unchanged
  - There may be rare diseases for which there are few patients but not obvious this is the norm. But it will push up health care costs
- Will clinical consultation will take longer? Possible, but also reduced need for repeat visits because of treatment failure?



<sup>1</sup>Garrison, L., Kamal-Bahl, S., Towse, A. Toward a Broader Concept of Value: Identifying and Defining Elements for an Expanded Cost-Effectiveness Analysis. Value in Health 2017 Feb;20(2):213-216 <sup>2</sup>Danzon, P. and Towse, A. (2002) The economics of gene therapy and of pharmacogenetics. Value in Health. 5(1), 5-13.



# **Polling Question #3**

With whom do you most agree?

- a. Dr. Zweifel
- b. Dr. Towse
- c. Undecided

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Poll: With whom do you most agree?

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# 3 The particular challenge to welfare states I



- Industrial countries devoted 21% of GDP to social expenditure in 2016, up from 15% in 1980 (OECD.Stat)
- In France, this share is maximum at **31.5%**, up from 20.2%
- In Spain, it is 24.6%, up from 15%
- An important part of this increase is due to public health
- The health share in total government expenditure rose from 10.4% in 1980 to 13.1% in 2013 across all industrial countries (OECD.Stat)
- In France, the increase is from 11.6% to 15.1%, in Spain, from 11.5% (1995) to 14.1%

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# 3 The particular challenge to welfare states II



- **Note:** In the United States, the health share in total government expenditure rose from **10.2%** (1980) to **20.5%** (2013)
- It is not the GDP share but the governmental share of HCE that drives policy
- Social expenditure is income redistribution, with HCE its major engine
- Politicians on the right argue that ever-increasing income redistribution is not sustainable due to its adverse incentive effects
- Politicians on the left point to continuing hardships for vulnerable groups (people with ill health, the working poor)

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### Rebuttal Part 2

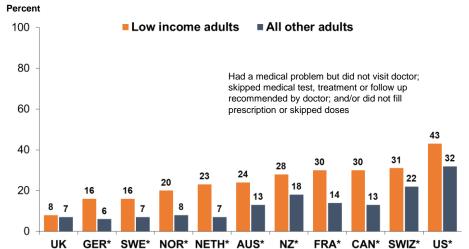


- I agree (i) it is share of public spend that matters and (ii) that it is redistributive
- But it is "pay as you go" publicly funded pensions and long term care as well as health care that are the challenges for Europe<sup>1</sup>
- And lets be clear that the income redistribution is very very effective

Office of Health Economics

Pammolli F., 2013. Demography, Sustainability and Growth. Notes on The Future of The European "Social Market" Economy. CERM Working Paper. Available at <a href="http://www.cermlab.it/wpcortent/uploads/cerm/Scocialmarketeconomy\_final\_oct20\_fp.pdf">http://www.cermlab.it/wpcortent/uploads/cerm/Scocialmarketeconomy\_final\_oct20\_fp.pdf</a>

### Cost-Related Access Barriers in the Past Year, by Income



\*Indicates differences are significant at p<0.05.

Note: "Low income" defined as household income less than 50% the country median. Sample sizes are small (n<100) in the Netherlands and

UK. Source: Slide from Peter Smith, OHE Annual Lecture 2018, forthcoming. Information sourced from 2016 Commonwealth Fund International Health Policy Survey, R. Osborn, D. Squires, M. M. Doty, D. O. Sarnak, and E. C. Schneider, "In New Survey of 11 Countries, U.S. Adults Still Struggle with Access to and Affordability of Health Care,' Health Affairs Web First, Nov. 16, 2016.



# English NHS Lifetime hospital costs: multiple of annual income by quintile 2011/12

Deprivation Quintile	Annual Income £	Lifetime Hospital Costs £		Times annual income	
		Male	Female	Male	Female
Most deprived 1	11492	50163	59255	4.37	5.16
2	16900	47743	54853	2.83	3.25
3	22204	45561	51701	2.05	2.33
4	29536	44291	49594	1.50	1.68
Least deprived 5	44980	43358	48409	0.96	1.08

Source: Peter Smith, OHE Annual Lecture 2018, forthcoming. Calculations from Asaria M, Doran T, Cookson R. 2016, "The costs of inequality: whole-population modelling study of lifetime inpatient hospital costs in the English National Health Service by level of neighbourhood deprivation", J Epidemiol Community Health doi:10.1136/jech-2016-207447 and Department for Work and Pensions (2013) Households Below Average Income. An analysis of the income distribution 1994/95 – 2011/12

### **Polling Question #4**



For which two groups do you believe that citizens are more likely to favor income redistribution to pay for more patient-centered medical care services? (select two)

- a. Working poor
- b. Unemployed
- c. Old-age retirees/pensioners
- d. Families with children
- e. People in poor health

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Poll: For which two groups do you believe that citizens are more likely to favor income redistribution to pay for more patient-centered medical care services?

(select two)

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# 4 Citizens' preferences: more or less redistribution? I



- The ultimate arbiters concerning sustainability of the welfare state in general and public HCE in particular are citizens
- They may be willing to sacrifice still more income in the interest of supporting the needy, in full cognition of the unfavorable side effects cited by economists
- Problem: Citizens' preferences concerning income redistribution are hardly ever observed
- In representative democracies, citizens only can vote for delegates to parliament who are for/against programs that involve additional redistribution of income

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# 4 Citizens' preferences: more or less redistribution? II



- In a situation like this, experimental evidence is of some value, derived e.g. from Discrete Choice Experiments (DCEs)
- Such a DCE was performed in 2008, with 979 participants from Switzerland
- The price attribute was the share of income taxed away for redistribution purposes (25% in the status quo)
- However, participants' preferences may also depend on the use of the money, e.g. in favor of people with ill health
- If they are willing to sacrifice more of their income in favor of this particular group, patient-centered medicine stands to **benefit**
- ➤ The welfare state would be called upon to grant its poor citizens access to this costly innovation

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### 5 The evidence I



Attribute	Label	Status Quo Level	Alternative Levels
Share of benefits going to			
<ul> <li>Working poor</li> </ul>	W_POOR	10%	5%, 15%
<ul> <li>Unemployed</li> </ul>	UNEMP	15%	5%, 25%
Old-age pensioners	PENS	45%	35%, 55%
<ul> <li>Families with children</li> </ul>	FAM	5%	10%
• People with ill health	ILL	25%	20%, 30%

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### 5 The evidence II

- On average, respondents are found to exhibit a preference against more income redistribution
- Consider an increase from 25% of GDP to 26% of GDP spent on redistribution
- To accept this, the Swiss would have to be compensated by 0.25% more personal income
- But what if the extra redistribution would benefit people in ill health?
- In fact, there is a preference against extra redistribution especially if people in ill health stand to benefit
- The ranking in preference is, Poor families > Working poor > Pensioners > Unemployed > People with ill health

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### 5 The evidence III



# WTP values for reallocation of a predetermined budget devoted to income redistribution

Group of recipients	DCE coeff.	Error prob.	Marginal effect	WTP, % of inc.
FAM if ILL excluded	0.1518	0.000	0.0387	7.37
WP if ILL excluded	0.0981	0.000	0.0250	4.76
PENS if ILL excluded	0.0724	0.000	0.0185	3.51
UMEMP if ILL excluded				
FAM if PENS excluded	0.0794	0.003	0.0203	3.86
FAM if UNEMP excluded	0.0980	0.000	0.0250	4.75

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### 6 Interpretation I

- The Swiss are against more income redistribution especially if people with ill health stand to benefit
- There may reasons for this unexpected result
- In Switzerland, no less than 27% of the population receive a personal subsidy towards their health insurance premium
- This share varies between Cantons, from 19.8% (Basel Country) to 32.8% (Zurich)
- The subsidy covers 33.8% of average premium in Berne but 75.2% in Neuchâtel
- At the same time, HCE per person varies by a factor of two between Cantons

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### 6 Interpretation II



- In addition, premiums must not vary between the insured of a given social health insurer
- Still, health insurers with an above-average share of young and male members must pay into a risk-adjustment scheme with a volume amounting to some 5% of GDP
- > These payments are ultimately borne by the favorable risks
- Redistribution according to health status is substantial but opaque, which may explain the resistance against it
- Another reason may be that ill health is not fully exogenous but in part the consequence of behavior (this may be true of the unemployed, too, see the relatively high WTP for FAM when UNEMP is excluded)

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### 7 Conclusion I

- In today's welfare states, the financing of HCE is a major instrument of income redistribution
- More of it would run against the average preferences of Swiss citizens
- This implies resistance against making costly patient-centered medicine available also to poorer citizens
- However, the experimental evidence available relates to just one country
- There may be populations who are more redistribution-minded
- A similar DCE performed in Germany [Pfarr (2013), PhD diss. U. Bayreuth] e.g. suggests that there is no resistance against redistribution up to 40% of GDP (Switzerland: 21%)

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### 7 Conclusion II



- However, citizens' preferences may not count for much even in democracies
- Policy makers are seeking to reduce the health share of government expenditure
- The WHO slogan, "Health for All" does not seem to attract many votes anymore
- ➤ Even in a redistribution-minded country like Germany, costly patient-centered medicine will be **resisted by the payors**, i.e. social health insurers and the government

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### Rebuttal Part 3



- I am not aware of an equivalent UK DCE. I am aware of opinion poll surveys that show a willingness to pay higher taxes for more health care, but the reality is that the political party proposing lower taxes often wins the election.
- How do we make sense of this? Paying for social insurance / tax based insurance or any form of income based contributions to a community rated insurance pool consists of two parts:
- (i) payment to a pool from which we get care (let's use Nyman<sup>1</sup> categorisation of a transient income transfer, when the care we need is provided and paid for) and
- (ii) expressing a preference over your willingness to buy care for other people.
- In the case of some schemes e.g US Medicaid, then it is a pure expression of redistributive preference for health care.



<sup>1</sup>Kelman S., and Woodward A. 2013. John Nyman and the Economics of Health Care Moral Hazard. ISRN Economics, Volume 2013, Article ID 603973,

# Final thoughts



- This may help also to explain the gap between demand side opportunity cost WTP for health gain (v) and supply side budget constrained opportunity cost (k). We are making a contribution to the care of others beyond an actuarially fair insurance policy, i.e. WTP = f(v+θ) where θ < v</li>
- So what is this telling us about the future of health care in Europe?
- There remains a problem of tax aversion and the likelihood that healthcare will rise as a share of GDP. This is about preferences for health and for equity as much as patient centred care.
- There is a separate issue of willingness to redistribute income to support access to health.
- If this is limited then the minimum supported package covers less healthcare for fellow citizens.
- Will WTP for altruism rise with income? Isn't it a superior good?

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