

## Dare to Share Sapere Aude 2.0



Glyn Elwyn

Spinoza Lecture 2015

"cursed be he by day, and cursed by night; cursed be he when he lieth down, and cursed be he when he riseth up ..."

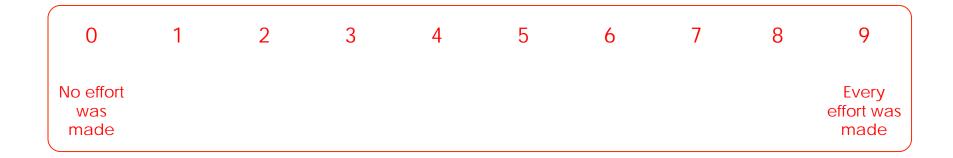
"no one can communicate with him, nor show him any favour, be within four cubits of him, nor read anything written by him ..."

"I value, above all things, the joining hands of friendship with those who are lovers of truth. Nothing brings more peace than the affectionate intercourse with such people" Spinoza

# How much effort was made to help you understand your health issues?



### How much effort was made to listen to the things that matter most to you about your health issues?



# How much effort was made to include what matters most to you in choosing what to do next?



### Sapere Aude

20 BC Horace

**First Book of Letters** 

1784 Immanuel Kant

Answering the question: What is Enlightenment?

1984 Michel Foucault

What is Enlightenment?



#### Dieoffinbarung



### Dieosfindarung Bancti LXXIII Johannis destheologen.

Daserst Lapitel.



Is ist die offindarung Ibelu Lbzisti. die vom Gott gebenhat / septen knechten zu zeigen / was van der kurtz gescheben soll / van hat sie deutste vand gesand durch septen engelzu septem knecht Johannes / der betzenget hat das wort Hottis / vand des zeugnis von Ibesu Kottis / vand des zeugnis von Ibesustigen der vie die daboten die wort der werflagung / vand behalten was depanten geschrieben ist / den die zeyt ist nabe.

Johannes/Densieben gemeyner ynn Asia/Bnad sey mit euch ynd fride/yon dem der da ist/ ynnd der dawar/end der da kompt/yn yon den sieben geystern/die dasind fur seynem stud/ynd yon Jidesu Ebristo/wilder ist der trewe zeuge ynd enst gepomer yonden todten/ynnd eyn stust aller konige ausst erden/der yns gestebt hat ynd gewaschen yonden sinden mit seynem blut/ynd dat yns zu konigen ynd peiestern gemacht fur Bottynnd seynem ynd dat yns zu konigen ynd peiestern gemacht fur Bottynnd seynem ynd erden selbigen sey peys ynd reych yd ewickeyt zu ewickeyt Amê. Sibe/er kompt mit den wolcken/ynnd ewickeyt zu ewickeyt alle geschlocht der erden/sab/Amen/Jeb byn das A ynnd das D/der ansang ynd das ende/spiecht der erden/sab/Amen/Jeb byn das A ynnd das D/der ansang ynd das ende/spiecht der ber das ende/spiecht der d

Ich Johannes ewr binder/vnd mitgenos am trubsal vnd am reps dynd an der geduld Ihesu Libisst/war ynn der Insulen Pathmos vind des wort Bottis willen vnd des zeugnis Ihesu Libissti/teb war ym geyst am sontage/vnd boette bynder myr eyne grosse siryn/als ers wir posaunen/die sprach/Ich byn das A vnd das D/der erst vnd der letzt/vnd was du sibist / das selveybe ynn eyn buch/vnnd sende es zu den gemeynen ynn Assa gen Epheson/vnd gen Sebmyrnen/vn gen Dergamon/vnd gen Ebyatyras/vnd gen Sardis/vnd gen Philas

belphian/vnd gen Laodicean.

Dund ich wand mich vmb/sufeben nach der feynt diemit myrres
bet/vnd als ich mich wand/fabe ich fieben gulden leuchter/vnd mits
ten vnter den guldenen leuchtern/eynen/der war eyns menschen fon
gleych/der war angerhan mit eynem leynen fytel/vnd begurttet vmb
biebuiste mit eynem gulde gurtel/seyn hewbt aber vnd seyn har war
weys wie eyn weyse wolle/als der schnee/vnd seyne angen wie eyn
fewrstamme/vn seyne susje/gleychwie eyn gluend erts/vn seynessyn
wie gros wasserrausschen/vnnd battesteben sterne vnn seyner band/

### 

"for we are removing impediments and difficulties so that other people may read it without hindrance"

#### 382

In principio creavit Deus caelum et terram. Terra autem erat inanis et vacua, et tenebrae erant super faciem abyssi: et spiritus Dei ferebatur super aquas. Dixitque Deus: Fiat lux. Et facta est lux.

Vulgate

Am Anfang schuf Gott Himmel und Erde. Und die Erde war wüst und leer, und es war finster auf der Tiefe; und der Geist Gottes schwebte auf dem Wasser. Und Gott sprach: Es werde Licht! und es ward Licht.

#### 1637

In den beginne schiep God den hemel en de aarde. De aarde nu was woest en ledig, en duisternis was op den afgrond; en de Geest Gods zweefde op de wateren. En God zeide: Daar zij licht: en daar werd licht.

#### Statenvertaling



Westermarkt 6

### Je pense, donc je suis

1637



#### **1637**

The first was never to accept anything for true which I did not clearly know to be such; carefully to avoid prejudice, and to comprise nothing more in my judgment than what was presented to my mind as to exclude all ground of doubt.

**Descartes** Discourse on the method

### Rationalism

# Dartmouth INSTITUTE

FOR HEALTH POLICY & CLINICAL PRACTICE

#### Radboudumc



## Scientific Center for Quality of Healthcare

### Competing Interests

- Financial Adviser to Emmi Solutions patient DA
- Non-financial Option Grids
- Non-financial Measures of Shared Decision Making



# Empirical Rationality



### EBM

## Clinical Practice Guidelines

### Problems?

### What problems?

Competing Interests

• Plethora

Resistance

Delusion

# Competing Interests

BMJ 2013;346:f3830 doi: 10.1136/bmj.f3830 (Published 14 June 2013)

Page 1 of 5

#### **FEATURE**

#### EVIDENCE BASED MEDICINE

#### Why we can't trust clinical guidelines

Despite repeated calls to prohibit or limit conflicts of interests among authors and sponsors of clinical guidelines, the problem persists. **Jeanne Lenzer** investigates

Jeanne Lenzer medical investigative journalist

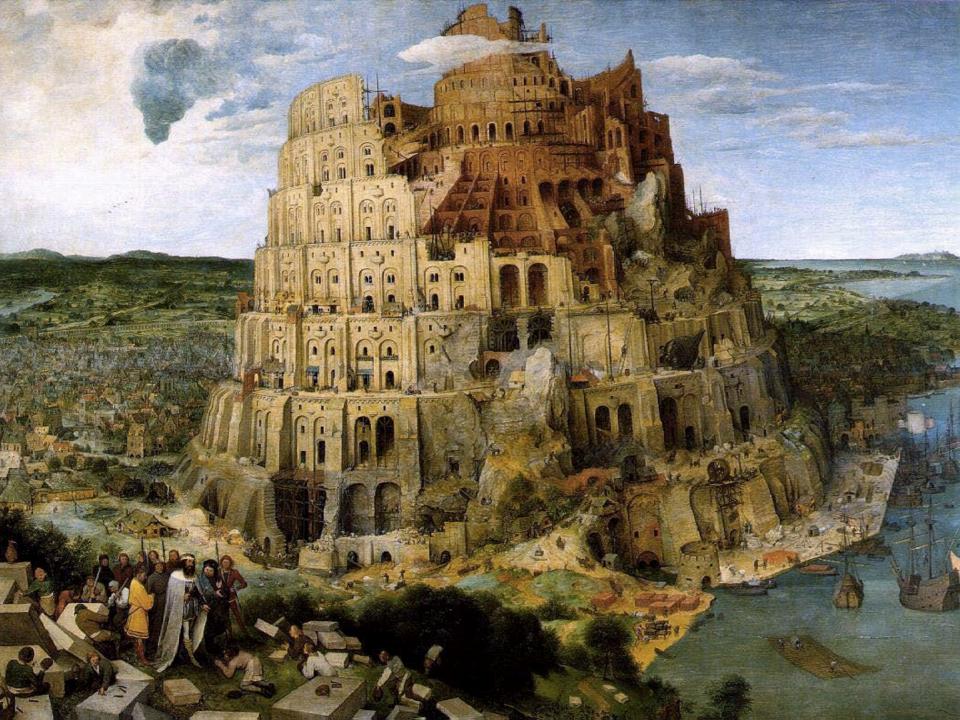
New York, USA

Expanding disease definitions in guidelines and expert panel ties to industry: a cross-sectional study of common conditions in the United States.

Moynihan RN, Cooke GPE, Doust JA, Bero L, Hill S, Glasziou PP.

PLoS Med. 2013;10(8):e1001500.

# Plethora



# An avalanche of apple pie: too many guidelines?

BMJ 2010;340:c1208

## **US National Guideline Clearinghouse**

Guidelines from 360 organizations

- Many for the same topic
- 471 hypertension guidelines
- 276 stroke guidelines

# \$ Millions



# Resistance

Perceived barriers to guideline adherence: a survey among general practitioners

Lugtenberg M, Burgers JS, Besters CF, Han D, Westert GP.

BMC Fam Pract. 2011;12:98

Practice guidelines in primary care, learning & usability in the physicians' decision-making process – a qualitative study.

Ingemansson M, Bastholm-Rahmner P, Kiessling A.

BMC Fam Pract. 2014;15(1):141

Is it time to drop the "knowledge translation" metaphor? A critical literature review.

Greenhalgh T, Wieringa S. *J R Soc Med.* 2011;104(12):501-509

# Delusion

#### J Allison Glover 1938

10-fold variation in tonsillectomy rates

"... tendency for the operation to be performed for no particular reason and no particular result."



## John E Wennberg 1973

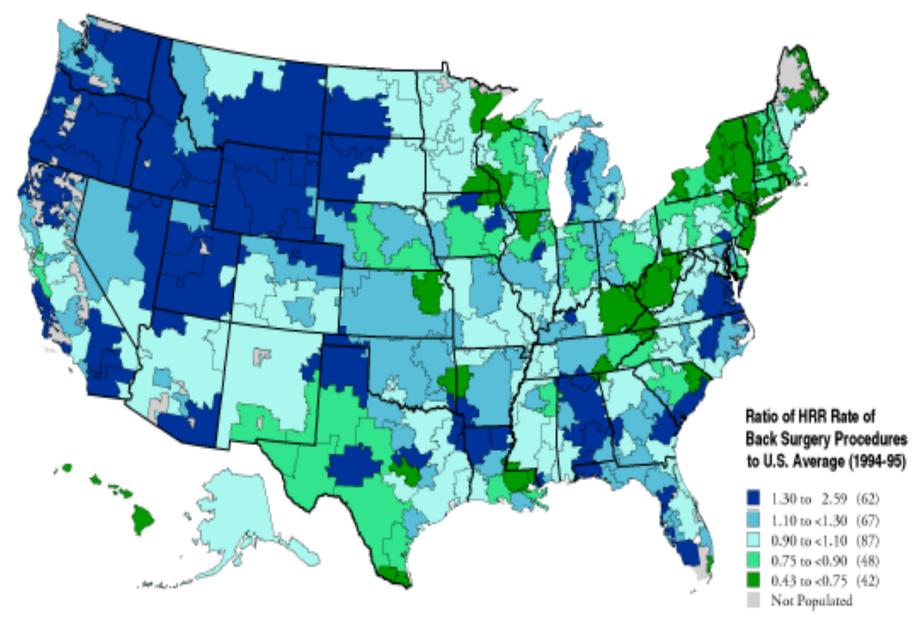
17-fold variation in tonsillectomy

6-fold variation in hysterectomy

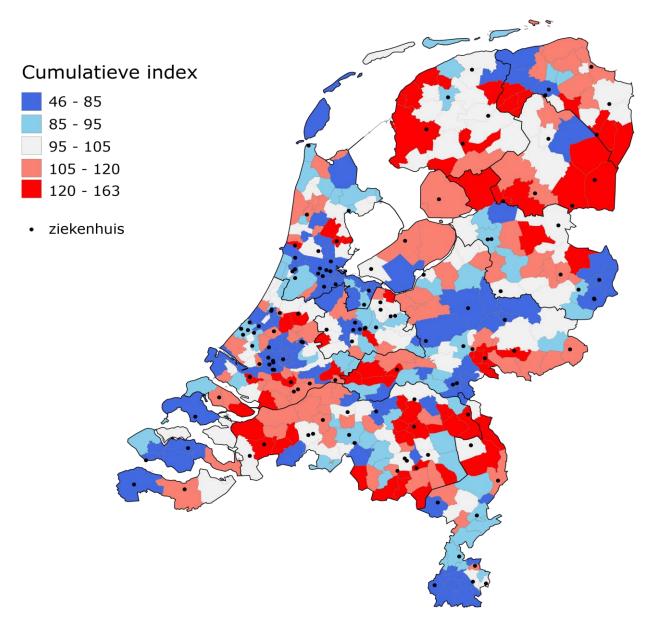
"... the problem of supplier-induced demand"



#### United States - Back surgery 306 regions 1984



### Netherlands - 8 surgical procedures



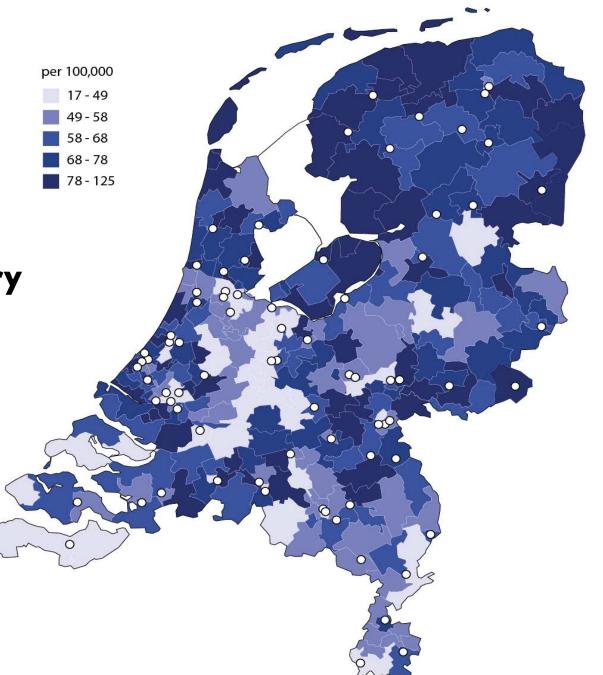
Back hernia,
Carpal tunnel
Prostate
Gallbladder
Varicose veins
Tonsillectomy
Cataract
Knee replacement

#### **Netherlands**

Lumbar disc surgery 2011

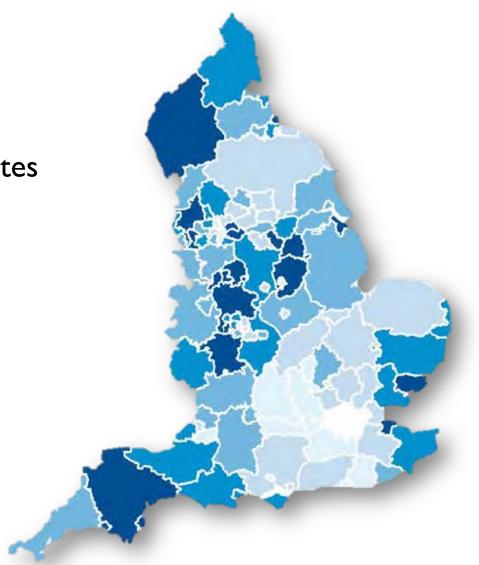
N per 100,000

Range 17 – 125

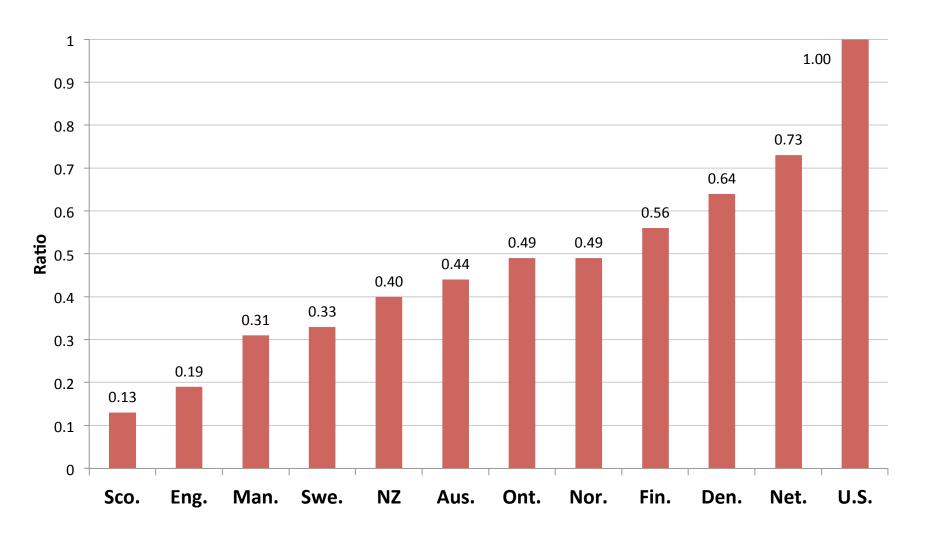


## **England 2010 - Hysterectomy**

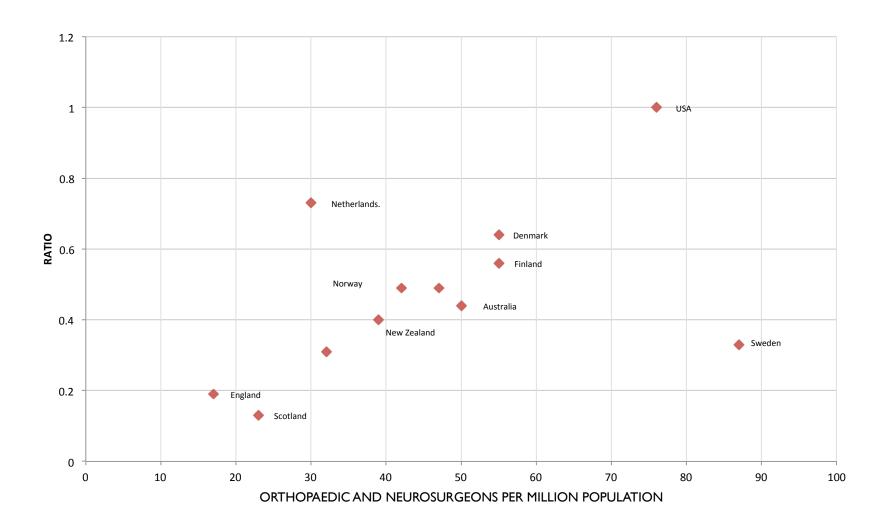
Greater than threefold variation in hysterectomy rates



## Back surgery: inter-country variation



#### Back surgery: correlation with available specialists



# Delusion

Evidence based guidelines or collectively constructed "mindlines?" Ethnographic study of knowledge management in primary care

Gabbay J, le May A. BMJ. 2004;329(7473):1013

"Socially constructed "knowledge in practice", collectively reinforced, brief reading, internalised, tacit *mindlines* ... clinicians interacting with each other, with patients, and pharmaceutical representatives"

10 years of mindlines: a systematic review and commentary.

Wieringa S, Greenhalgh T. Implement Sci. 2015;10(1):45

"The concept of mindlines challenges the naïve rationalist view of knowledge implicit in some EBM publications"

Greenhalgh 2015

## Guidelines

Wrong tool

Wrong audience



#### Dieoffinbarung



## Dieosfindarung Bancti LXXIII Johannis destheologen.

Daserst Lapitel.



Is ist die offindarung Ibelu Lbzisti. die vom Gott gebenhat / septen knechten zu zeigen / was van der kurtz gescheben soll / van hat sie deutste vand gesand durch septen engel zu septem knecht Johannes / der betzenget hat das wort Hottis / vand des zeignis von Ibelu Kbzisto / was er gesehen hat / Beligist der da lieset vir die dabozen die wort der werflagung / van behalten was depanten geschieben ist / den die zeit ist nabe.

Johannes/Densieben gemeyner ynn Asia/Bnad sey mit euch ynd fride/yon dem der da ist/ ynnd der dawar/end der da kompt/yn yon den sieben geystern/die dasind fur seynem stud/ynd yon Jidesu Ebristo/wilder ist der trewe zeuge ynd enst gepomer yonden todten/ynnd eyn stust aller konige ausst erden/der yns gestebt hat ynd gewaschen yonden sinden mit seynem blut/ynd dat yns zu konigen ynd peiestern gemacht fur Bottynnd seynem ynd dat yns zu konigen ynd peiestern gemacht fur Bottynnd seynem ynd erden selbigen sey peys ynd reych yd ewickeyt zu ewickeyt Amê. Sibe/er kompt mit den wolcken/ynnd ewickeyt zu ewickeyt alle geschlocht der erden/sab/Amen/Jeb byn das A ynnd das D/der ansang ynd das ende/spiecht der erden/sab/Amen/Jeb byn das A ynnd das D/der ansang ynd das ende/spiecht der ber der das sende/spiecht der das ende/spiecht das ende/spiecht der das ende/spiecht der das ende/spiecht der

Ich Johannes ewr binder/vnd mitgenos am trubsal vnd am reps dynd an der geduld Ihesu Libisst/war ynn der Insulen Pathmos vind des wort Bottis willen vnd des zeugnis Ihesu Libissti/teb war ym geyst am sontage/vnd boette bynder myr eyne grosse siryn/als ers wir posaunen/die sprach/Ich byn das A vnd das D/der erst vnd der letzt/vnd was du sibist / das selveybe ynn eyn buch/vnnd sende es zu den gemeynen ynn Assa gen Epheson/vnd gen Sebmyrnen/vn gen Dergamon/vnd gen Ebyatyras/vnd gen Sardis/vnd gen Philas

belphian/vnd gen Laodicean.

Dund ich wand mich vmb/sufeben nach der feynt diemit myrres
bet/vnd als ich mich wand/fabe ich fieben gulden leuchter/vnd mits
ten vnter den guldenen leuchtern/eynen/der war eyns menschen fon
gleych/der war angerhan mit eynem leynen fytel/vnd begurttet vmb
biebuiste mit eynem gulde gurtel/seyn hewbt aber vnd seyn har war
weys wie eyn weyse wolle/als der schnee/vnd seyne angen wie eyn
fewrstamme/vn seyne susje/gleychwie eyn gluend erts/vn seynessyn
wie gros wasserrausschen/vnnd battesteben sterne vnn seyner band/

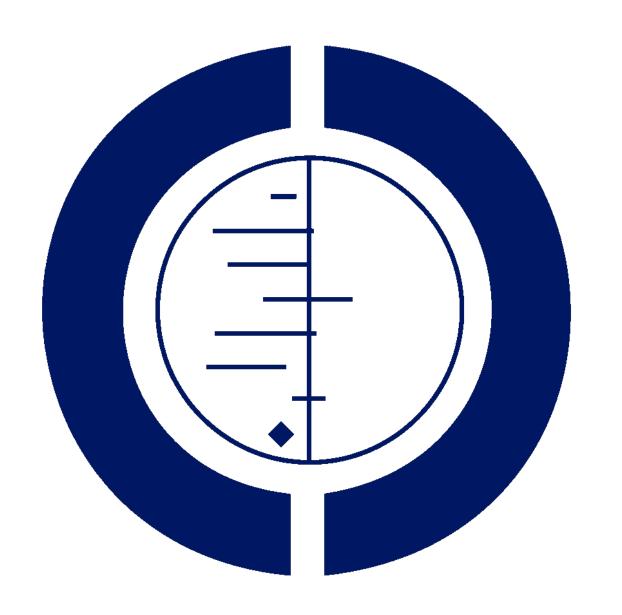
"for we are removing impediments and difficulties so that other people may read it without hindrance"



# 

# We the people

# Guidelines for people



#### WikipediA

#### English

The Free Encyclopedia
4 966 000+ articles

#### Deutsch

Die freie Enzyklopädie 1 853 000+ Artikel

#### Русский

Свободная энциклопедия 1 253 000+ статей

#### 中文

自由的百科全書 840 000+ 條目

#### Português

A enciclopédia livre 887 000+ artigos

#### Español

La enciclopedia libre 1 200 000+ articulos

#### 日本語

フリー百科事典 982 000+ 記事

#### Français

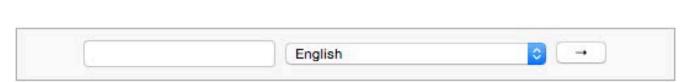
L'encyclopédie libre 1 661 000+ articles

#### Italiano

L'enciclopedia libera 1 223 000+ voci

#### Polski

Wolna encyklopedia 1 133 000+ haseł



### Guidelines for the public

- Design problems
- Literacy obstacles
- Option blindness
- Difficult to find
- Search engine elusive





Google-Suche

Auf gut Glück!

Google.de angeboten auf: English

## 

## Shared Decision Making

### Helping a person develop

an informed preference

#### DELIBERATION

Team Talk Option Talk

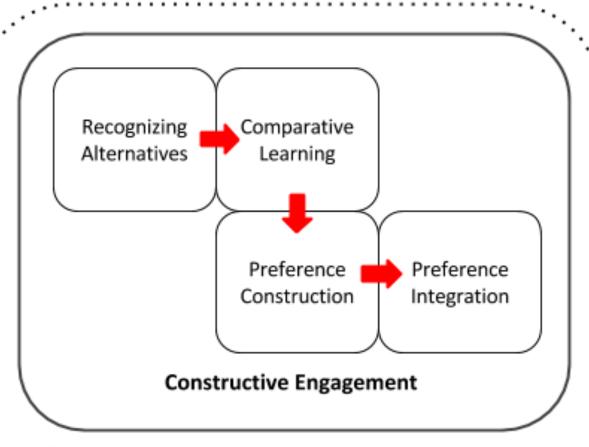
Initial preferences

Preference Construction

Informed preferences

Decision Talk

#### Collaborative Deliberation



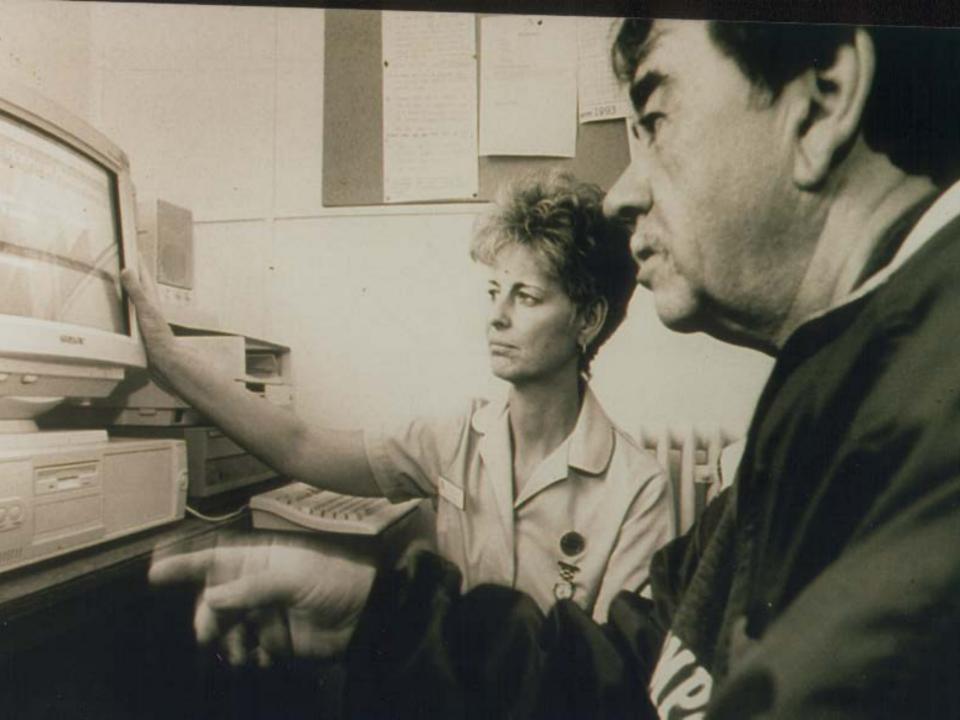
#### Context

Emotional states of participants

Resources, constraints, capacities

The range and accessibility of alternatives

Social norms shaping the construction of preferences



#### **Patient Decision Support**

Data about options and outcome probabilities

## Decision aids for people facing health treatment or screening decisions

Stacey D, Légaré F, Col NF, Bennett CL, Barry MJ, Eden KB, Holmes-Rovner M, Llewellyn-Thomas H, Lyddiatt A, Thomson R, Trevena L, Wu JH.

Cochrane Database Syst Rev. 2014 Jan 28;1:CD001431

#### Patient decision tools - 115 RCTs

#### **Strong evidence**

- Increase knowledge
- Accurate risk perceptions
- Conservative decisions

#### **Patient decision tools - 115 RCTs**

#### **Strong evidence**

- Increase knowledge
- Accurate risk perceptions
- Conservative decisions

#### **Weak evidence**

- Reduce cost
- Improve adherence
- Better communication







## Fiction





Hope

## Implementation

#### Giving Patient Decision Tools

is not

**Shared Decision Making** 

### **Shared Decision Making**

is about

### Supporting Informed Preferences

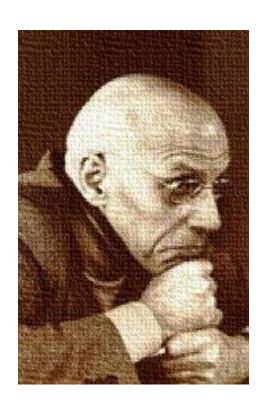
### 1597

scientia potentia est

## is Power

# Knowledge is

Power



**Power** 

# Knowledge Power

Authoritarian Physicians & Patients' Fear Of Being Labeled "Difficult" Among Key Obstacles To Shared Decision Making.

Frosch DL, May SG, Rendle K, Elwyn G.

Health Affairs 2012;31:1030-8

Will I be considered a trouble maker if I ask questions?

Will I be considered a difficult patient if I disagree?



Frosch DL, May SG, Rendle K, Elwyn G. Authoritarian Physicians & Patients' Fear Of Being Labeled "Difficult" Among Key Obstacles To Shared Decision Making. Health Affairs 2012;31:1030–8.

## Power imbalance prevents shared decision making

Joseph-Williams N, Edwards A, Elwyn G

**BMJ** 2014 May 14; 348: g3178

## More useful tools?

#### 2<sup>nd</sup> Generation

**Encounter Tools** 

**Enable Comparison** 

Generate mindlines







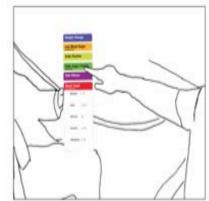
#### **Low Blood Sugar Weight Change Blood Sugar Side Effects** (Hypoglycemia) (A1c Reduction) **Daily Routine Daily Sugar Testing** Cost Metformin - 555555 (Monitoring) None These figures are estimates and are for comparative reference only. Actual out-of-pocket costs vary over time, by pharmacy, insurance Metformin Metformin Insulin plan coverage, preparation and dosage. Under some plans name brands may be comparable in cost to generics. +++++ Monitor 2 - 5 times weekly, 4 to 6 lb. gain less often once stable. Metformin (Generic available) \$0.10 per day \$10 / 3 months Insulin Insulin **Glitazones** OR Monitor once or twice daily, Insulin (No generic available - price varies by dose) More than 2 to 6 lb. gain less often once stable. Lantus: Vial. per 100 units: \$10 Pen, per 100 units: \$43 NPH: Vial, per 100 units: \$6 **Glitazones** Pen, per 100 units: \$30 Exenatide **Glitazones** Short acting analog insulin: Vial, per 100 units: \$10 Monitor 3 - 5 times weekly, Pen, per 100 units: \$43 3 to 6 lb. loss less often once stable. Glitazones (No generic available) Sulfonylureas Exenatide Exenatide Take in the hour \$7.20 per day \$650 / 3 months \* \* \* before meals. Monitor twice daily after meals 2 to 3 lb. gain when used with Sulfonylureas, as needed when used Exenatide (No generic available) with Metformin. \$9.00 per day \$800 / 3 months **Gliptins** Sulfonylureas Sulfonylureas Take 30 min. before meal. Sulfonylureas (Generic available) Monitor 2 - 5 times weekly, OR less often once stable \$0.10 per day \$10 / 3 months Gliptins Gliptins Gliptins (No generic available)

\$6.20 per day

Monitor 2 - 5 times weekly, less often once stable. \$560 / 3 months

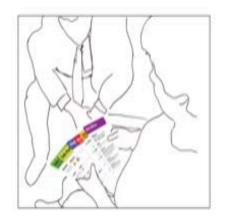
















# option grid





#### Breast cancer surgery

Use this grid to help you and your healthcare professional decide whether you should have a mastectomy, or a lumpectomy with radiotherapy.

Frequently asked questions	Lumpectomy with radiotherapy	Mastectomy		
What is removed?	The cancer lump is removed, with	The whole breast is removed.		
Which surgery is best for long- term survival?	Survival rates are the same for both options.	Survival rates are the same for both options.		
coming back in the breast?	breast in about 10 in 100 women (10%) in the 10 years after a lumpectomy. Recent improvements in treatment may have reduced this risk.	of the scar in about 5 in 100 women (5% in the 10 years after a mastectomy.  Recent improvements in treatment may have reduced this risk.		
Will I need more than one operation?	Possibly, if there are still cancer cells in the breast after the lumpectomy. This can occur in up to 20 in 100 women (20%).	No, unless you choose breast reconstruction.		



#### Breast cancer surgery

Use this grid to help you and your healthcare professional decide whether you should have a mastectomy, or a lumpectomy with radiotherapy.

Frequently asked questions	Lumpectomy with radiotherapy	Mastectomy  The whole breast is removed.		
What is removed?	The cancer lump is removed, with some surrounding tissue.			
Which surgery is best for long-	Survival rates are the same for both	Survival rates are the same for both		
What are the chances of cancer coming back in the breast?	Breast cancer will come back in the breast in about 10 in 100 women (10%) in the 10 years after a lumpectomy. Recent improvements in treatment may have reduced this risk.	Breast cancer will come back in the area of the scar in about 5 in 100 women (5% in the 10 years after a mastectomy.  Recent improvements in treatment may have reduced this risk.		
operation?	in the breast after the lumpectomy. This can occur in up to 20 in 100	reconstruction.		

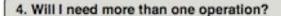


## Explain it

Give it

Use it





#### Lumpectomy with radiation



Possibly, 20 in 100 women (20%) might need another operation to remove more tissue or lymph nodes that have cancer.

#### Mastectomy





Yes, if you choose breast reconstruction. Possibly, if your lymph nodes have cancer.

#### 5. How long will it take to recover?

#### Lumpectomy with radiation



Most women are home on the same day as surgery, but this may vary. It will take about a week before you can resume usual activities.

#### Mastectomy





Most women are home on the same day as surgery (longer with reconstruction).

It will take several weeks, or longer, before you fully recover and can resume usual activities.

Using Option Grids: steps toward shared decision-making for neonatal circumcision.

Patient Educ Couns. 2015, Epub.

Fay M, Grande SW, Donnelly K, Elwyn G.

## Summary

• Frame shift

Increased collaboration

No extra time

Supporting shared decision making using an Option Grid for osteoarthritis of the knee in an interface musculoskeletal clinic: a stepped wedge trial.

Patient Education and Counseling. Epub.

Glyn Elwyn, Tim Pickles, Adrian Edwards, Katharine Kinsey, Kate Brain, Robert G. Newcombe, Jill Firth, Katy Marrin, Alan Nye, Fiona Wood

## Summary

Knowledge gain

Increased collaboration

No extra time

# Trustworthy COI & Evidence

User Based Design

## Fast Frugal

Gist & Visual

Easy to Use

#### Evidence synthesis 2<sup>nd</sup> generation

- Communication improves
- Patients ask more questions
  - Gain knowledge
- Better decisions
- Better adherence

Mindline generation

Evidence into practice

Informed clinicians

Team coherence

#### Guidelines

Wrong tool

Wrong audience

"... we are removing impediments so that people may read without hindrance"

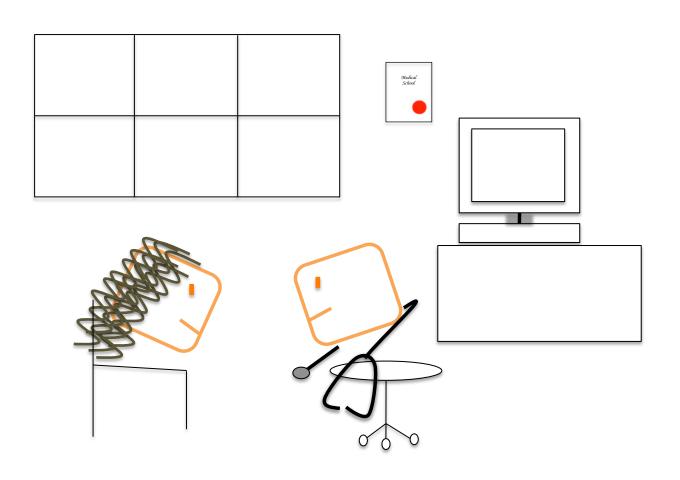
# Attitude

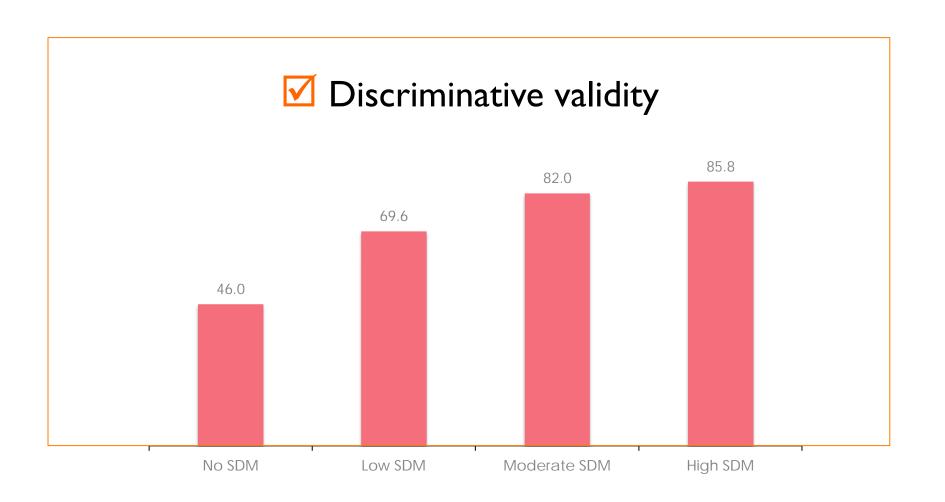
#### **Problem**

No generic, valid, scalable, patient-reported measure of shared decision making

## collaboRAIE

I,341 adults randomised to view animated clinical encounter and completed battery of surveys

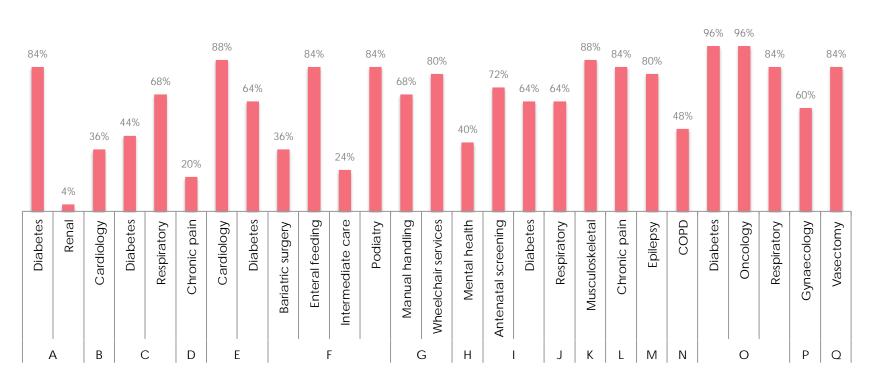




- ☑ Concurrent validity
- ☑ Intra-rater reliability
- ☑ Responsiveness to change

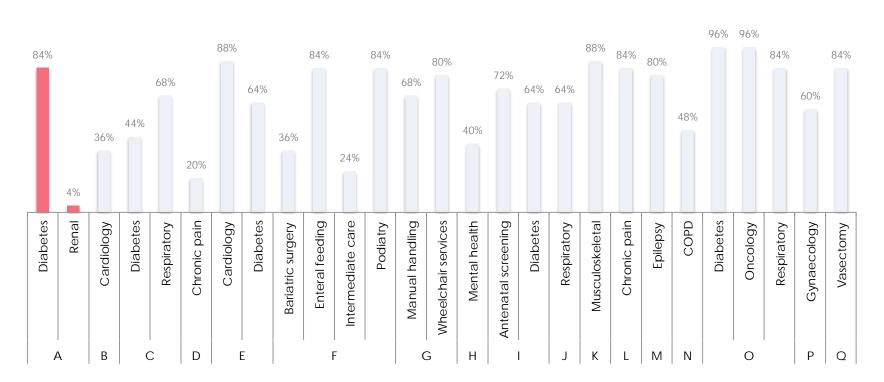
5,167 patients completed
CollaboRATE immediately following visit to NHS clinical team

#### ☑ Variation between teams

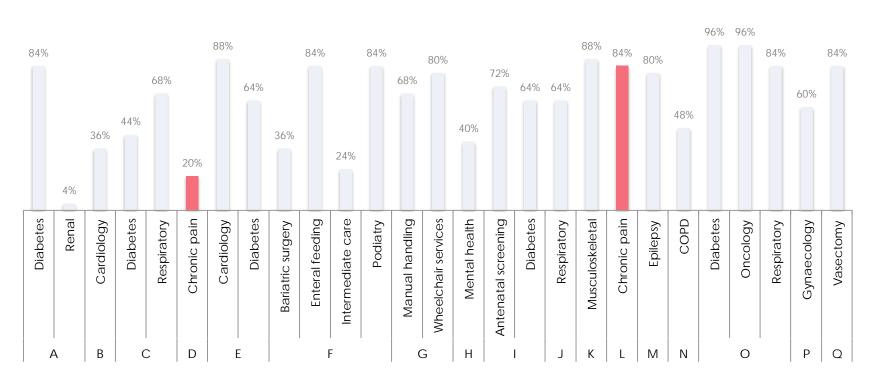


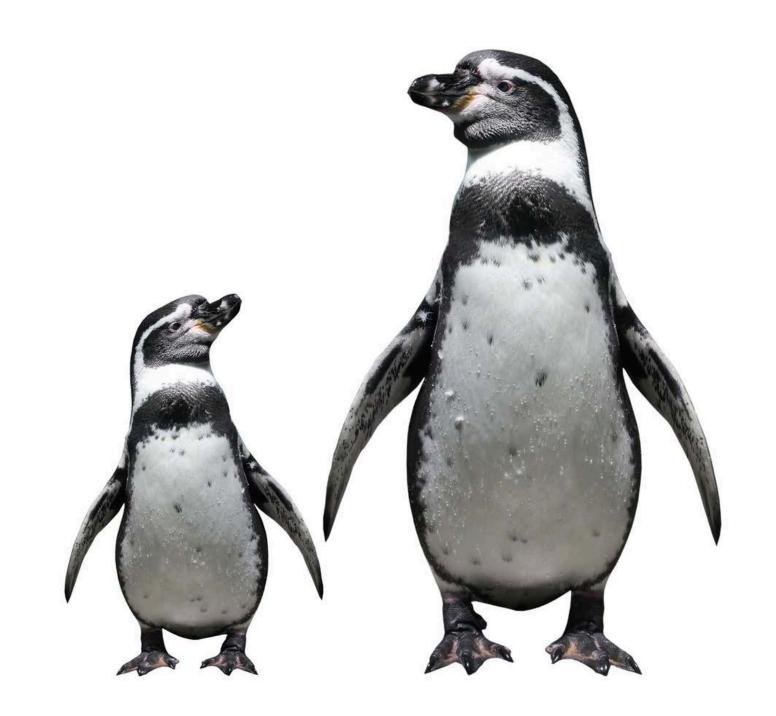
Hospital and Clinical Speciality

#### ☑ Variation between teams



#### ☑ Variation between teams





#### More ...

Psychometric evaluation in real world clinical setting

Uptake and representativeness using various channels of delivery

#### CollaboRATE publications

Thompson R, Nye A, Walker E, Elwyn G
Prevalence and patterns of shared decision-making in the United Kingdom In development.

Barr PJ, Thompson R, Walsh T, Grande S, Ozanne E, Elwyn G

The psychometric properties of CollaboRATE: A fast and frugal patient-reported measure of the shared decision-making process

Journal of Medical Internet Research. 2014;16(1):e2

Elwyn G, Barr PJ, Grande SW, Thompson R, Walsh T, Ozanne EM

Developing CollaboRATE: A fast and frugal patient-reported measure of shared decision making in clinical encounters

Patient Education and Counseling. 2013 Jun 11;93(1):102–7



Elwyn G. "Patientgate"-digital recordings change everything. BMJ. 2014;2078(March):10-11. doi:10.1136/bmj.g2078.

## Patient Recordings

Elwyn G. 'Patientgate'--digital recordings change everything. *BMJ* 2014;**348**:g2078.

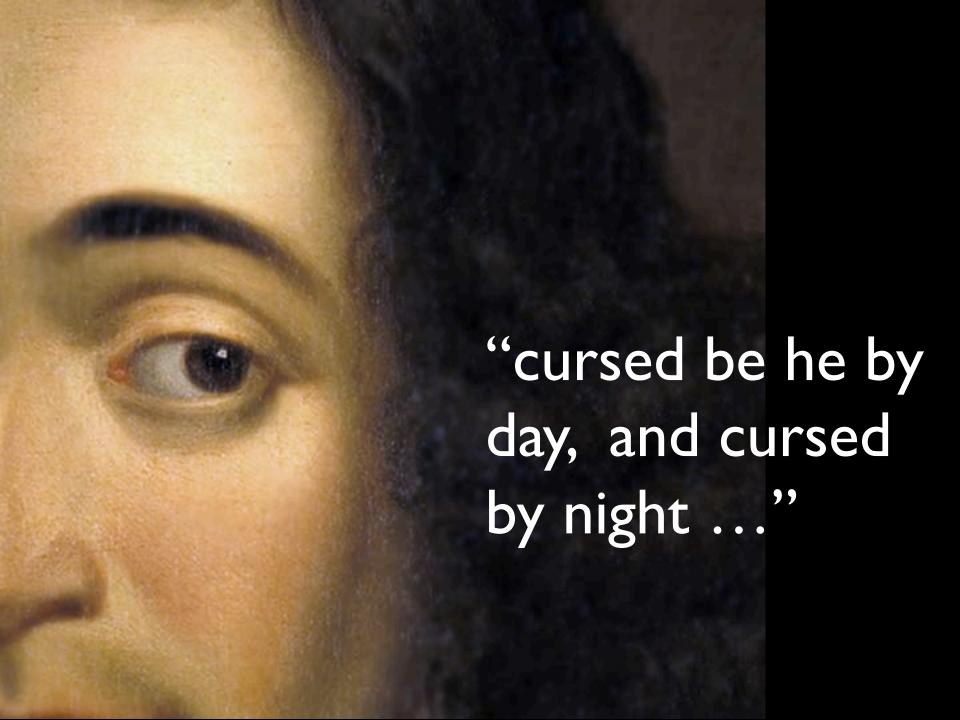
Tsulukidze M, Grande SW, Thompson R, et al. Patients covertly recording clinical encounters: threat or opportunity? A qualitative analysis of online texts. *PLoS One* 2015;**10**:e0125824.

Elwyn G, Barr P, Grande S. Patients' recording clinical encounters: A path to empowerment? Assessment by mixed methods. *BMJ Open* 2015; **In Press**.

#### Summary

- Dare to share
- Use collaborative tools
- Measure performance
- Feedback intelligently
- Empower patients
- Put on organizational agenda

# Sapere Aude



## glynelwyn@gmail.com