

Patient Forums: Telling the Patient Story and its Impact on Healthcare

NEW HORIZONS 2017

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Gerard van Oortmerssen



Erasmus Medical Center Rotterdam Patient Participation Project

- Design of healthcare pathway
- Research agenda
- 12 GIST and Sarcoma patients, 12 specialists
- Additional research by Patientplatform Sarcomas: Vallue assessment
- Choose from a list of around 100 different words (values)



Value assessment

- What is <u>really</u> important for you as a person
- Which values best describe the current treatment situation
- Which values would describe your <u>ideal</u> treatment situation

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Richard Barrett's method

Seven Levels of Personal Consciousness

| | Positive Focus/ Excessive Focus |
|-----------------------|---|
| Service 7 | Service to Humanity and the Planet Compassion, Humility, Future Generations. |
| Making a Difference 6 | Making a Difference in the Community Actualising Meaning, Collaboration, Intuition, Mentoring, Empathy. |
| Internal Cohesion 5 | Finding Meaning in Existence Integrity, Alignment, Authenticity, Creativity, Passion, Honesty, Trust. |
| Transformation 4 | Continuous Growth and Development Adaptability, Continuous Improvement, Courage, Team Player. |
| Self-esteem 3 | Building a Sense of Self Worth Pride in Self, Self-Reliant, Self-Discipline, Positive Self Image. Arrogance, Status, Power, Glamour, Rigidity. |
| Relationship 2 | Harmonious Relationships Family, Friendship, Belonging, Open Communication, Ritual. Blame, Jealously, Judgment, Conflict, Gossip. |
| Survival 1 | Physical Survival and Safety Health, Nutrition, Financial Stability, Self-Defence. Violence, Greed, Corruption, Territorial. |



The Methodist Hospital Houston

THE JOURNEY TO FULL SPECTRUM

Current Culture 2001 (1695)

1. patient satisfaction (609)

2. cost effectiveness (551)3. continuous

improvement (532)

4. being the best (495)

5. accountability (487)

6. **commitment** (487)

7. bureaucracy (411) (**L**)

8. continuous learning (366)

9. achievement (355)

10. *teamwork* (349)

PL = 9-1 IROS (P) = 2-2-5-0 IROS (L) = 0-0-1-0

Current Culture 2002 (6814)



2. patient satisfaction (2608)

3. **being the best** (2231)

4. continuous improvement (2067)

5. **<u>commitment</u>** (2028)

6. cost effectiveness (1874)

7. **compassion** (1724)

8. **teamwork** (1676)

9. achievement (1490)

10. continuous learning (1467)

PL = 10-0

IROS (P) = 2-3-5-0

IROS (L) = 0-0-0-0

Current Culture 2003 (7502)

1. **accountability** (3352)

2. patient satisfaction (2956)

3. **being the best** (2376)

4. **commitment** (2270)

5. <u>compassion</u> (2087)

6. continuous improvement (2066)

7. **integrity** (1921)

8. **teamwork** (1878)

9. cost effectiveness (1816)

10. <u>**respect**</u> (1662)

PL = 10-0

IROS (P) = 2-4-4-0

IROS (L) = 0-0-0-0

7 Matches

9 Matches

Inderline = PV & CC match P = Positiv

5 Matches

<u>Underline</u> = PV & CC match P = Positive I = Individual

Red = PV, CC & DC match L = Potentially Limiting R = Relationship

Red = CC & DC match (hollow dots) O = Organizational

Blue = PV & DC match WWW.valuescentre.com S = Societal



Results: Medical Professionals (10)

| Level | Personal Values | | | Current Cultural Values | | | Desired Cultural Values | | |
|------------------------------|----------------------|---|------|----------------------------|---|------|--------------------------------|---|-----|
| 7 | | | | | | | | | |
| 6 | | | | | | | | | |
| 5 | | | | | | | | | |
| 4 | | | | | | | | | |
| 3 | | | | | | | | | |
| 2 | O | | | | | | | | |
| 1 | | | | | | | | | |
| | | | | | | | | | |
| | <u>reliability</u> | 7 | 3(R) | <u>involvement</u> | 6 | 5(I) | collaboration across teams | 5 | 6(0 |
| | collaboration | 6 | 5(R) | professionality | 6 | 3(0) | <u>involvement</u> | 5 | 5(1 |
| | efficiency | 5 | 3(I) | bureaucracy (L) | 5 | 3(0) | <u>reliability</u> | 5 | 3(F |
| | enthusiasm | 5 | 5(I) | collaboration across teams | 4 | 6(O) | continuous improvement | 5 | 4(0 |
| | being liked (L) | 4 | 2(R) | <u>collaboration</u> | 4 | 5(R) | dialogue with patients | 5 | 6(0 |
| | clarity | 4 | 5(I) | teamwork | 4 | 4(R) | information sharing | 5 | 4(0 |
| | humor/fun | 4 | 5(I) | patient satisfaction | 4 | 2(0) | teamwork | 5 | 4(F |
| ral entropy: ent culture: | performance-oriented | 4 | 3(I) | trust | 4 | 5(R) | honesty | 4 | 5(I |
| 12% | ambition | 3 | 3(I) | <u>reliability</u> | 3 | 3(R) | open communication | 4 | 2(R |
| | <u>involvement</u> | 3 | 5(I) | goal oriented | 3 | 4(0) | patient satisfaction | 4 | 2(0 |
| | perseverance | 3 | 4(I) | | | | | | |
| | honesty | 3 | 5(I) | | | | | | |
| | innovation | 3 | 4(I) | | | | | | |
| | positive attitude | 3 | 5(I) | | | | | | |

Zwart onderlijnd = PW & HC
Oranje = PW, HC & GC
Oranje = HC & GC

Blauw = PW & GC

P = Positief

L = Mogelijk beperkend (witte cirkel)

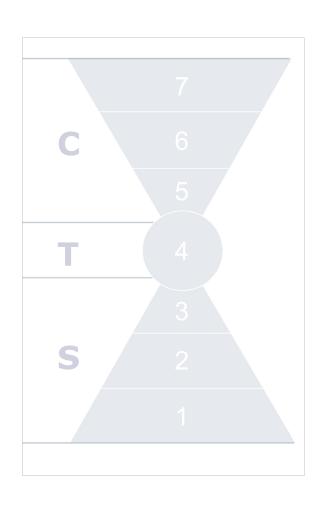
I = Individueel

R = Relatie

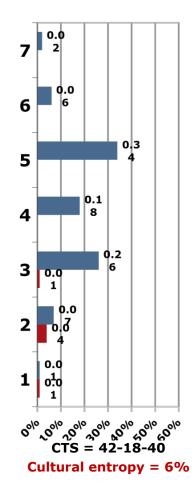
O = Organisatie S = Samenleving



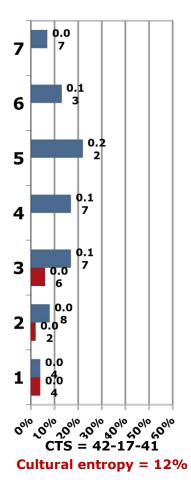
Results: Medical Professionals (10)



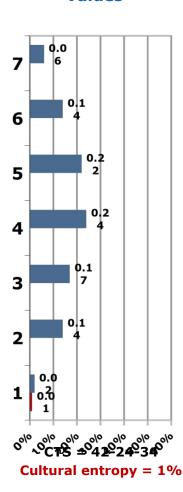
Personal Values



Current Cultual Values



Desired Cultural Values



C = Algemeen belang

T = Transformatie

S = Eigenbelang





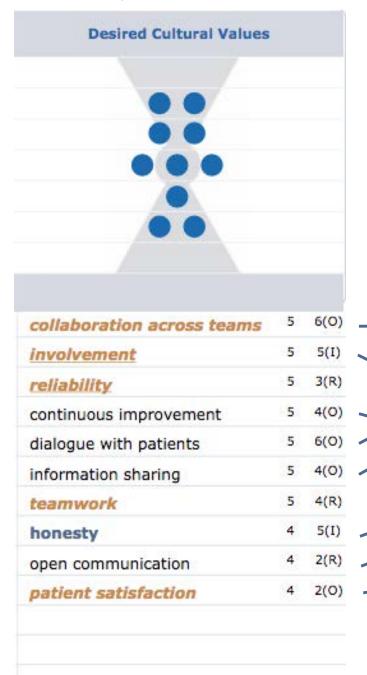
Medical Professionals (10)

Cultural Entropy Report

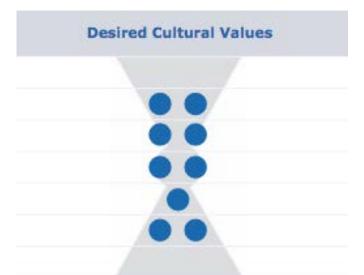
| Level | Potentially limiting values (# votes) | Cultural Entropy % |
|-------|---|--------------------|
| 3 | bureaucracy (5) hierarchy (1) | 6% of total votes |
| 2 | internal competition (1) kingdoms (1) | 2% of total votes |
| 1 | controll (2) short term orientation (1) caution (1) | 4% of total votes |
| Total | | 12% of total votes |

Desired Cultural Values

Medical professionals



Patients



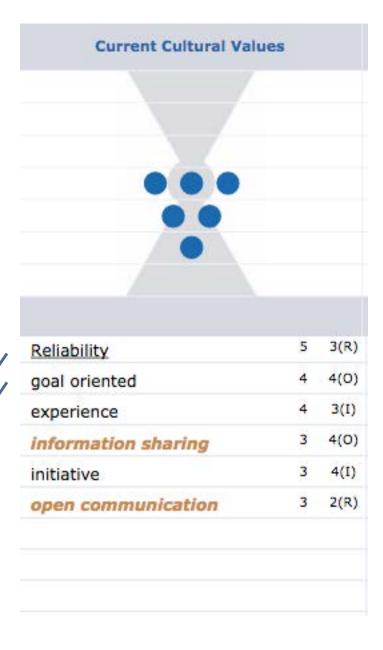
| collaboration accross teams | 5 | 6(0) |
|-----------------------------|---|------|
| dialogue with patients | 4 | 6(0) |
| information sharing | 4 | 4(0) |
| involvement | 3 | 5(I) |
| continuous improvement | 3 | 4(0) |
| honesty | 3 | 5(1) |
| open communication | 3 | 2(R) |
| professional development | 3 | 3(0) |
| patient satisfaction | 3 | 2(0) |

Current Cultural Values

Medical professionals

Current Cultural Values 6 5(I) involvement 6 3(0) professionality 5 3(0) bureaucracy (L) 4 6(0) collaboration across teams 4 5(R) collaboration 4 4(R) teamwork 4 2(0) patient satisfaction 4 5(R) trust 3 3(R) reliability 3 4(0) goal oriented

Patients



Value Jumps

Value Med.prof. Patient

Collaboration across teams and departments 1 $\frac{4}{4}$ Dialogue with patients 3 $\frac{4}{4}$ Information sharing 4 $\frac{4}{4}$



Discussie fora

Patients share detailed medical information:

caregiver for mother dx with GIST 12/31/12

31x19x9 cm primary tumor removed 12/12/12

400 mg gleevec 1/15/13 to 12/6/13

Recurrence and removal of 3 masses from the omentum (3.5 to 4.4 cm) on 12/6/13

Sutent 25 mg. since 1/15/14 37.5 mg. since 8/14 (failed Sutent 6/15)

Sorefinib (naxavar) 7/3/15

more tumors removed 7/13/15

Votrient 9/4/15 to 12/30/15

50 tumors removed 1/16/16'

Wildtype Gist NO Kit or PDFRA mutation, SDH intact

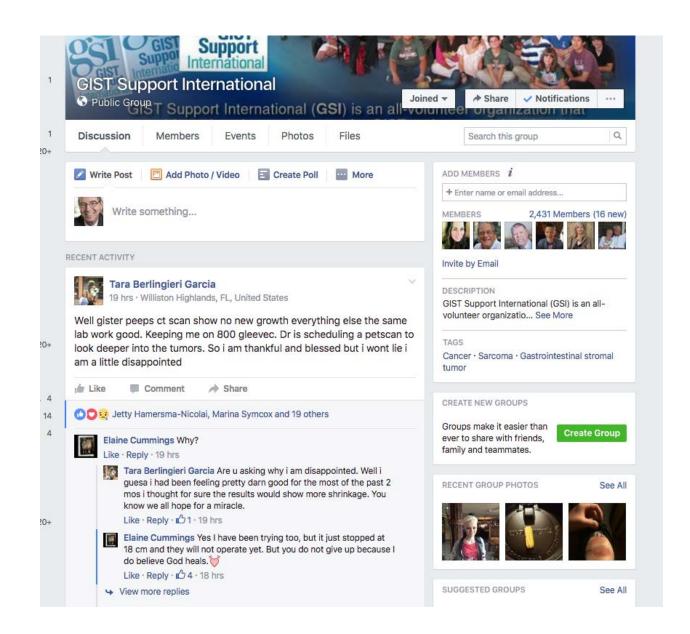


Discussion fora:

•Information on:

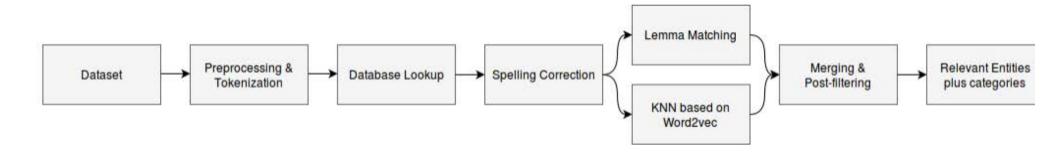
- Development of disease, treatment, sideeffects
- Strategies to cope with side-effects
- Adherence to therapy
- Co-morbidity: bad-luck or is there relationship?
- Quality of life







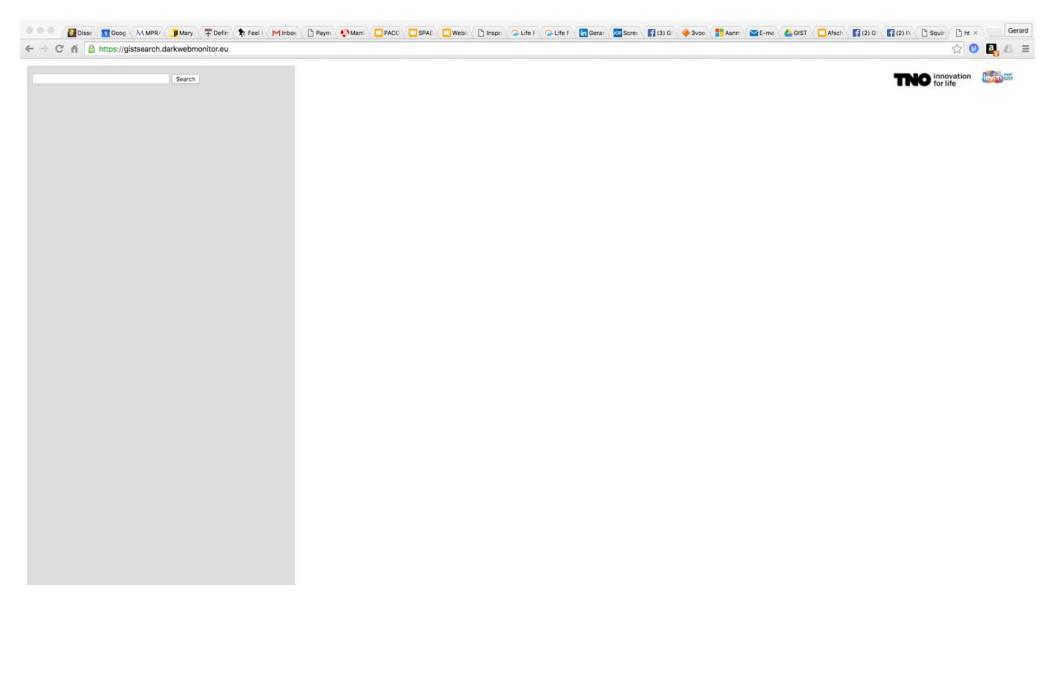
Analysis of discussions



UMLS: thesaurus with medical terms (NHI) and other databases (DBPedia)

Translation in case of Dutch or other languages

Word2Vec: semantic relationships





Example

Normal dose of imatinib for GIST patients is 400 mg per day.

In case of progression: increased to 800 mg per day.

In one hospital policy was to advise patients to take full 800 mg at dinner

Question: would it be better to split the dose?

Based on forum discussion analyses: yes, most patients experience less side effects when splitting the dose.

Based on result, policy of hospital was changed.

Something else was found: patients reported that taking the medicine with dark chocolate greatly diminishes nausea.



Example: research agenda

- Patients participate in agenda setting for research in university hospital
- Longlist of topics was composed on basis of analysis of (inter)national discussion fora: What is important for patients?
- Longlist was used to consult patients through web survey:
 What are your priorities and why?
- 75 patients responded
- 3 topics were selected and are now worked on by a PhD student
- 1 topic could be addressed on basis of existing knowledge, now published in magazine of patient organisation

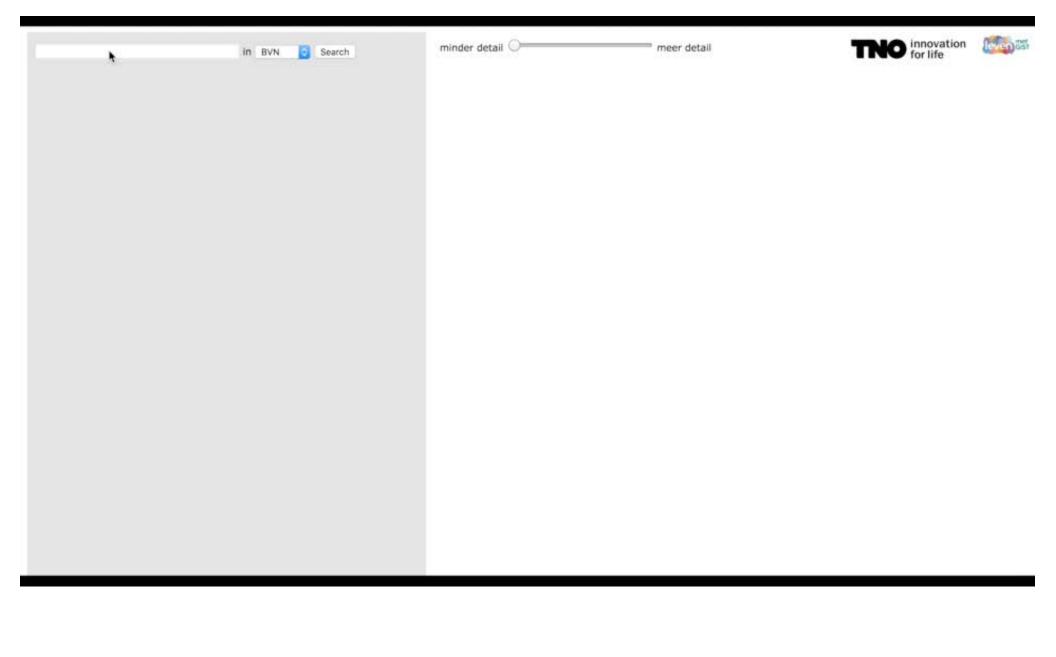


Further development

- Gaining experience, fine-tuning of software
- Building experience: project with 4 other cancer patient organisations in Netherlands, combine with surveys, build experience and improve algorithms
- Further development of text mining: quantification, statistical analysis, validation: clinical testing of hypotheses (PhD project)
- Combining informal knowledge with:
 - Pubmed, curated medical knowledge
 - Registries with structured medical patient data
- Chatbot: intelligent conversational interface to assist users



Thank you!





How the project started

- 2005 my nearest colleague got diagnosed with GIST - he died in 2010
- 2007 my brother was diagnosed with GIST
- 2010 I was diagnosed with GIST, same rare mutation as my brother
- 2013 found another relative with GIST
- 2016 my (and my colleague's) secretary diagnosed with GIST