Why the quality of quality metrics counts in healthcare: an illustration from breast cancer surgery

S J Cano
Modus Outcomes, Boston MA USA & Stotfold UK
Stefan.cano@modusoutcomes.com

L R Pendrill
SP Technical Research Institute of Sweden,
Measurement Technology, Box 857, SE-50115 Borås (SE), phone:+46 767 88 54 44,
mailto:leslie.pendrill@sp.se

Session 1: European Policies in the healthcare area
and the European Commission Initiative on Breast Cancer
Application of standards:

- **1st generation** (technical and product specifications)
- **2nd generation** (management systems and processes)
- **3rd generation** (values, principles and behaviours)
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Policy & societal issues
- Grand challenges
- Energy
- Climate change

Standardisation
- Harmonization
- Transparency
- Uniformity

Regulation
- Specifications
- Rules
- Safety limits
- ....

Metrology
- Instruments
- Test methods
- Laboratories
- Traceability
- Measurement uncertainty

Quality & Innovation Infrastructure

Pendrill 2012
Outcome:

d) Patient satisfaction with outcome of breast surgery

- **Numerator** – number of people in denominator who report **satisfaction with aesthetic outcome** of breast conserving surgery.
- **Denominator** – number of people early breast cancer who have had breast conserving surgery.

Outcome:

Patient **satisfaction** with discussion about breast surgery options.
Reality Sound(bites)

- Clinicians and researchers need Clinical Outcome Assessments that measure the health constructs that they claim to measure.

- Many variables difficult to measure directly e.g. disability, quality of life.

- Clinical Outcome Assessments should be valid if they are to be used as measurement instruments.

The quest for better health care, driven by measuring safety and quality, is well intentioned and has notable achievements. But like the Biblical story about building a better city, the measurement effort has become a cacophonous muddle that is distracting clinicians, raising the cost-of-care delivery, and not helping consumers make better health care choices.

The lack of measurement standards [has resulted]...in contradictory conclusions.

The problem isn’t requiring measurement; health care needs meaningful measures…But…despite their vast number, the [existing] metrics don’t measure the things that define health for patients and success for clinicians.

Health Affairs Blog - http://healthaffairs.org/blog - The Quality Tower Of Babel Posted
By Elizabeth Teisberg On April 13, 2015 @ 10:37 am
Satisfaction with Breast Area: Reconstruction procedures
(Adjusted for age, deprivation, comorbidity, radiotherapy)

- Equal, feel natural: somewhat satisfied (52)
- Closely matched: somewhat satisfied (54)
- Feel to touch: somewhat satisfied (58)
- Size: very satisfied (59)
- Feel normal in clothes: very satisfied (60)
- Shape in a bra: very satisfied (65)
- Appearance clothed: very satisfied (69)
- Can wear fitted clothes: very satisfied (70)
- Breast lined up: very satisfied (73)
- Comfortable with bra fit: very satisfied (75)

TOPS: Breast Surgery Outcomes Data

Dr. Smith | National Average
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Satisfaction with Breasts | 71 | 65
Satisfaction with Outcome | 75 | 78
Psychosocial Well-being | 72 | 41
Sexual Well-being | 91 | 80
Physical Well-being | 89 | 80

American Society of Plastic Surgeons

Process of Care

Information | Surgeon | Medical Staff | Office Staff
--- | --- | --- | ---
71 | 80 | 85
68 | 56 | 52

UK National Audit

The Mastectomy Reconstruction Outcomes Consortium (MROC) Study

PI: A Pusic, E Wilkins
R01 funded 5 year study
10 centers, 3000 patients to be following prospectively with the BREAST-Q
1400 patients accrued since opening in Feb 2012
The speakers, moderators and rapporteurs of Session 1 will focus on the following aspects: 'What is the context of the ECIBC project?', 'What are the actions at European level impacting on/influenced by the ECIBC project?', 'What are the pros and cons of European-level initiatives in the healthcare area?'

**Context of ECIBC project** – should include 3rd generation standards = person-centred care

**Actions at European level ⇔ ECIBC project** – coordinated effort to tackle challenges in area, such as difficulties to measure and need to demonstrate validity

**Pros/cons of European-level initiatives** – Potential symbiosis with major European programmes, e.g. EURAMET/EMPIR Art 185 Horizon 2020
1) Specific documented demands of European and international Standards Developing Organisations (SDOs) for metrological research in any area.

2) Metrological research for health-related standardisation work addressing documented demands of SDOs

3) Identified standardisation needs for metrological research with a potential for high impact

**STAIR-EMPIR: Joint initiative of CEN-CENELEC and EURAMET**

Since several years CEN-CENELEC and EURAMET have a mutually beneficial cooperation. To ensure CEN-CENELEC and EURAMET co-operation on EMPIR projects, a dedicated group was created, called STAIR-EMPIR. STAIR stands for Standardization, Innovation and Research.
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