



Lecture 5: Nursing sensitive outcomes: clinical instruments (questionnaires) and PROMs and PREMs in context of complex/long-term care

PART II

HANNA HOPIA
JAMK University of Applied Sciences
FINLAND

PRESENTED BY PHD, PRINCIPAL LECTURER, ASSOCIATE PROFESSOR,
HANNA HOPIA



Learning outcomes



Participants know what PROMs and PREMs are as part of Nursing indicator measurements.



Participants know where to find relevant, valid information regarding PROMs and PREMs measurement in the context of complex and long-term care.

NURSE SENSITIVE INDICATORS and OUTCOMES

Olli & Tervo-Heikkinen 2020, Greenhalgh et al. 2018

How to assess nursing outcomes



- ✓ Through processes, economy
- ✓ From the point of physiological aspects
- ✓ From professionals point of view



- Patient Reported Outcome Measures, **PROMs**
- Patient Reported Experience Measures, **PREMs**

Definitions of PROMs and PREMs

PROM = Patient Reported Outcome Measures



....are validated and standardized self-reporting instruments using patients' views and opinions to assess their health status and well-being.

Usually are questionnaire-based instruments

PREM = Patient Reported Experience Measures



...are self-reporting instruments which measure a patients' perception of their experience during hospitalization or while receiving care.

Usually are questionnaire-based instruments



Modified from Pitkänen et al 2018



PROMs

Patient reported outcome measures

Collect information from patients themselves about health status and wellbeing

Ask directly from patients
Use valid patient-reported indicators

PREMs

Patient reported experience measures

Collect information from patients themselves about how well the health service is treating them.

Ask directly form patients
Use valid patient-reported indicators

Clinical Functional Independence Measures

Clinical Measurements

Tests

Objective measurements

From healthacare providers' point of view

Healthcare providers observe and assess patient's health status and ability to function

Using nursing excellence /expertise



PROMs and PREMs

SIMILARITIES

Provide a patient-centric view of healthcare

Data from questionnaires can be used for

research,

quality improvement projects,

clinician performance evaluation,

benchmarking (national databases)

-> to allow comparisons in clinical care.

economic evaluation.

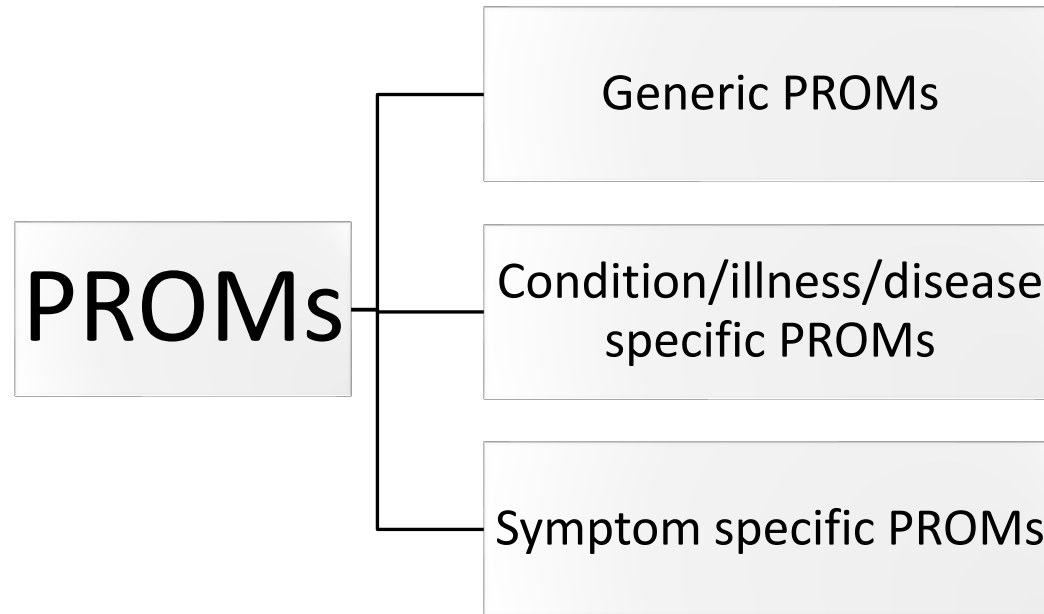
DIFFERENCES

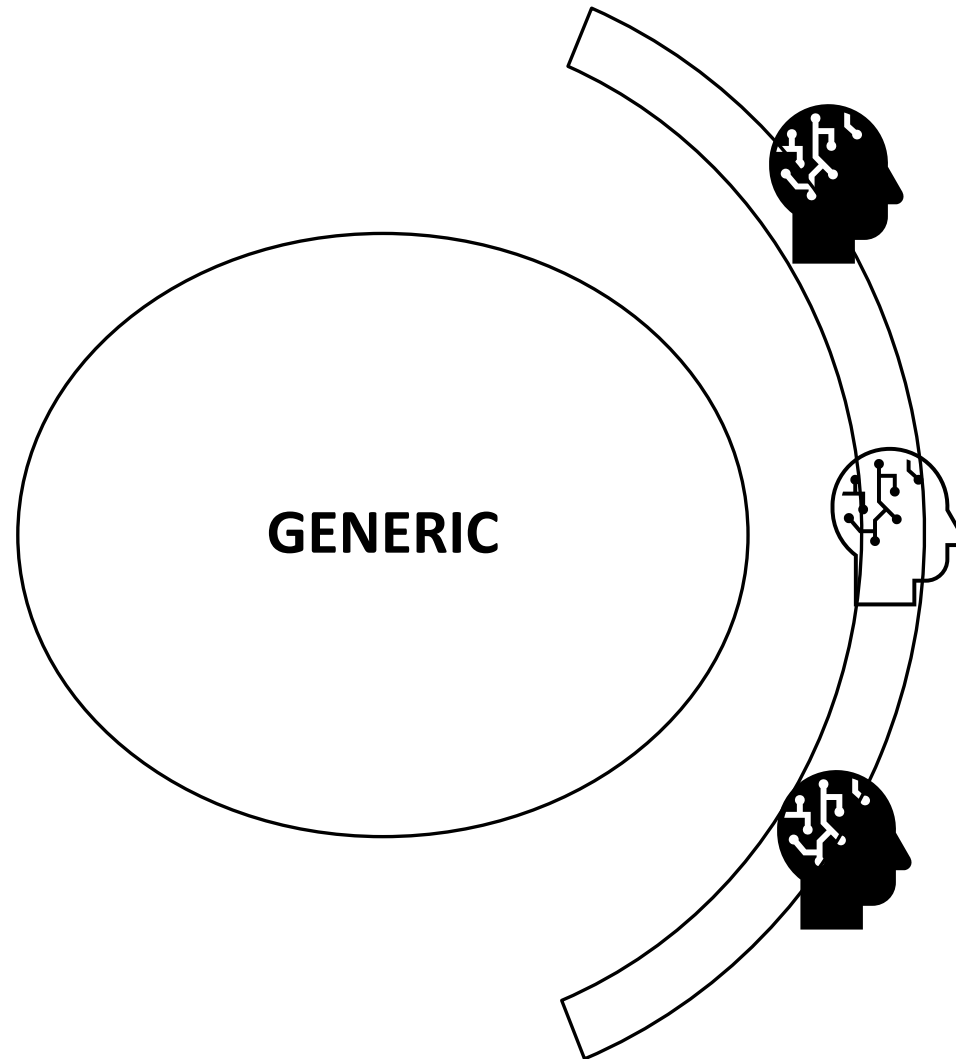
PREMs do not look at the outcomes of care but the impact of the process of the care on the patient's experience such as communication with healthcare providers and and timeliness of assistance.

PROMs seek to measure a patient's health status



How are PROMs used?





Routinely used across a wide range of health services to improve care.

For example: After the surgery procedure PROMs measure a patient's health-related quality of life at a single point in time and are collected through self-completed questionnaires.

For example: EuroQol 5 Dimension (EQ5D-5L™)



Under each heading, please tick the ONE box that best describes your health TODAY.

MOBILITY

- I have no problems in walking about
- I have slight problems in walking about
- I have moderate problems in walking about
- I have severe problems in walking about
- I am unable to walk about

SELF-CARE

- I have no problems washing or dressing myself
- I have slight problems washing or dressing myself
- I have moderate problems washing or dressing myself
- I have severe problems washing or dressing myself
- I am unable to wash or dress myself

USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)

- I have no problems doing my usual activities
- I have slight problems doing my usual activities
- I have moderate problems doing my usual activities
- I have severe problems doing my usual activities
- I am unable to do my usual activities

Example of EQ5D-5L™ and EQ-VAS™ combined questionnaire

Source: Kingsley & Patel 2017



Example of EQ5D-5L™ and EQ-VAS™ combined questionnaire

Source: Kingsley & Patel 2017

PAIN / DISCOMFORT

I have no pain or discomfort

I have slight pain or discomfort

I have moderate pain or discomfort

I have severe pain or discomfort

I have extreme pain or discomfort

ANXIETY / DEPRESSION

I am not anxious or depressed

I am slightly anxious or depressed

I am moderately anxious or depressed

I am severely anxious or depressed

I am extremely anxious or depressed



Example of EQ5D-5L™ and EQ-VAS™ combined questionnaire

Source: Kingsley & Patel 2017

We would like to know how good or bad your health is TODAY.

This scale is numbered from 0 to 100.

100 means the best health you can imagine.

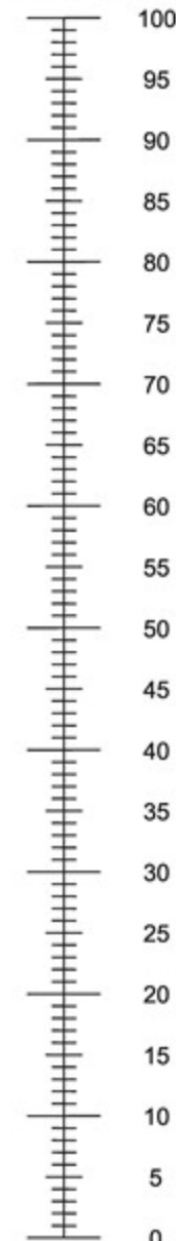
0 means the worst health you can imagine.

Mark an X on the scale to indicate how your health is TODAY.

Now, please write the number you marked on the scale in the box below.

YOUR HEALTH TODAY =

The best health you can imagine



The worst health you can imagine



Oswestry
Disability
Index
(functional
ability)

EORTC QLC –
C30,
Rotterdam
Symptom
Checklist
RSCL (QoL of
cancer
patients)

Fall Risk
Assessment
Tool (FRAT)

Pressure
ulcer
prevention
Braden

Nutritional
Risk
Screening
(NRS)

Alcohol Use
Disorders
Identification
Test (AUDIT)

Oxford Hip
Score (OHS)
–condition
specific
measure for
hip
procedures.

Condition/illness/disease specific PROMS, examples



The Hospital
Anxiety and
Depression Scale
HADS

Beck Depression
Inventory BDI

McGill Pain
Questionnaire
MPQ

Visual Analog
Scale VAS

Multidimensional
Fatigue Inventory
MFI

Symptom spesific PROMS, **examples**



PROMs Patient reported outcomes measures

Directly reported by patients
without intervention by
clinicians

Relates to the patient's
health, quality of life and
functional status that is
associated with her/his
disease, treatment, such as

- physical function
- mood
- fatigue
- pain

Empowers patients to be
heard and enable their
outcomes to be quantified
and measured against
normative, quantitative data

Emphasizes patients'
individual views and
opinions in order to assess
their health status and
wellbeing

**Adding value to
healthcare providers
view about holistic
state of patient's
condition by measuring
changes in health status
and quality of life.**

Example: a cancer patient

A patient with cancer diagnoses has been receiving a new drug that have good clinical outcomes in terms of improving patients' length of survival.

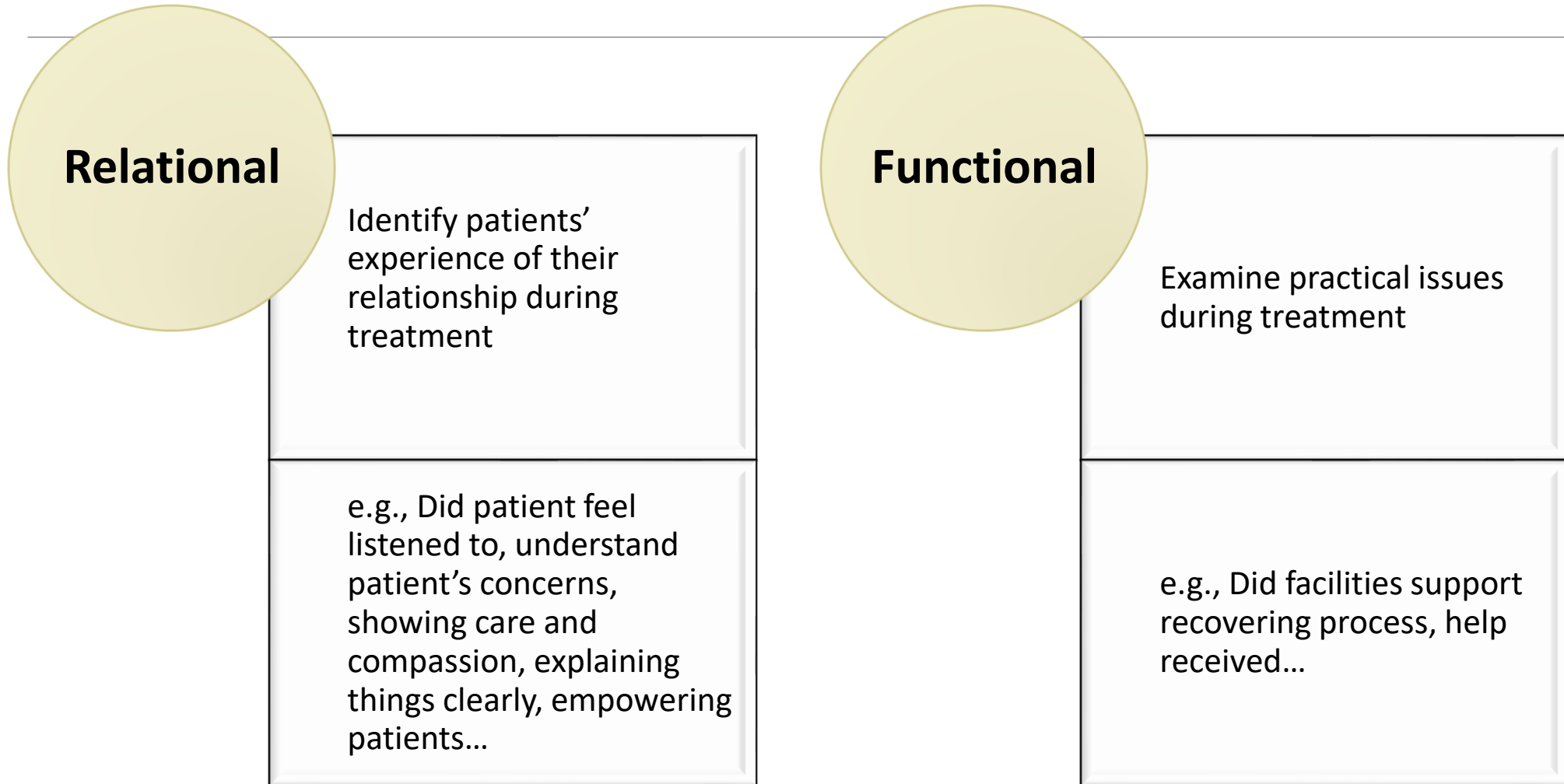
PROMs expose that the patient is non-compliant with the prescribed drug because of multiple side effects which influence patient's everyday life.

The measurement of PROMs gives professionals opportunity to assess the effectiveness of the drug given to the patient from many dimensions

-> including the patient's functional status and quality of life and overall satisfaction with the situation having new drugs

Types of PREMs

(e.g., Kingsley & Patel 2017)





Examples of PREMs categories

Environment: hospital / ward / clinic

Care received

Support: emotional, physical

Decision-making (shared decisions with patients and healthcare providers)

Family-centered approach

Interaction with staff

Information received concerning care (test results, examinations etc.)



What needs to be considered...

**Choose the correct
measuring instrument ->
to ensure validated,
reliable data**

How the data are
collected and used

Do professionals
understand why the data
are collected by using
PROMs and PREMs

Cost of measuring

Multicultural population
-> translation of PROMs
and PREMs
questionnaires is
frequently required

Limitations

PREMs can be synonymous with patient expectation or satisfaction

-> are subjective terms

Do PREMs measure adequacy of healthcare or quality of healthcare?

PREMs can be mixed up by factors not directly associated with the quality of healthcare, e.g., health outcomes.

PREMs can reflect patients' underlying expectations and views for an ideal healthcare experience vs. their actual care experience.



Examples of the articles published in the journal



The endometriosis daily diary: qualitative research to explore the patient experience of endometriosis and inform the development of a patient-reported outcome (PRO) for endometriosis-related pain

Implementing patient-reported outcomes in routine clinical care for diverse and underrepresented patients in the United States

Evaluation and validation of a patient-reported quality-of-life questionnaire for Parkinson's disease

Cancer treatment regimens and their impact on the patient-reported outcome measures health-related quality of life and perceived cognitive function

Integrated Palliative Outcome Scale for People with Dementia: easy language adaption and translation

To share or not to share: communication of caregiver-reported outcomes when a patient has colorectal cancer

Health-Related Quality of Life in people with Multiple Sclerosis: How does this Population Compare to Population-based Norms in Different Health Domains?



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[Home](#) > [Our work](#) > [Indicators, measurement and reporting](#) > Patient-Reported Outcomes

Patient-reported outcome measures

A useful website

Examples

- **High burden cancers** - lung cancer, bowel cancer, breast cancer, prostate cancer, pancreatic cancer, brain and central nervous system cancer
- **Cardiovascular diseases** - coronary heart disease, stroke, atrial fibrillation and flutter, non-rheumatic valvular disease, cardiomyopathy and hypertension
- **Mental health disorders** - anxiety, depression, psychological distress and alcohol use disorders
- **Musculoskeletal conditions** - back pain and problems, osteoarthritis and rheumatoid arthritis
- **Injuries and trauma** - burns, brain injury and orthopaedic trauma
- **Respiratory diseases** - chronic obstructive pulmonary disease and asthma
- **Neurological conditions** - dementia, epilepsy, migraine, Parkinson's disease and Alzheimer's disease
- **Gastrointestinal diseases** - chronic liver disease and inflammatory bowel disease
- **Endocrine disorders** - diabetes
- **Oral disorders** - dental caries and severe tooth loss
- **Hearing and vision disorders** - hearing loss and vision loss
- **Skin disorders** - dermatitis, pressure injuries and eczema
- **Infectious diseases** - HIV/ AIDs and influenza
- **Kidney and urinary diseases** - chronic kidney disease
- **Blood and metabolic disorders** - iron-deficiency anaemia
- **Reproductive and maternal conditions** - genital prolapse and polycystic ovarian syndrome.



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THE NATIONAL PATIENT REPORTED OUTCOME MEASURES (PROMS) PROGRAMME



Useful websites

References (1/2)

Kingsley, C & Patel, S. 2017. Patient-reported outcome measures and patient-reported experience measures, *BJA Education* 17(4), 137–144.

Peters et al. 2014. The routine collection of patient-reported outcome measures (PROMs) for long-term conditions in primary care: A cohort survey. *BMJ open*. 4. e003968. 10.1136/bmjopen-2013-003968.

Desomer A, Van den Heede K, Triemstra M, Paget J, De Boer D, Kohn L, Cleemput I. 2018. Use of patient-reported outcome and experience measures in patient care and policy – Short report. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). KCE Reports 303Cs. D/2018/10.273/39.

Murphy et al. 2018. Identification, description and appraisal of generic PROMs for primary care: a systematic review. *BMC Family Practice* 19:41 <https://doi.org/10.1186/s12875-018-0722-9>

Bowling & Hankins et al. 2013. A short measure of quality of life in older age: the performance of the brief Older People's Quality of Life questionnaire (OPQOL-brief). *Archives of Gerontology and Geriatrics* 56(1):181-187. DOI:10.1016/j.archger.2012.08.012

Boyce, M. B., & Browne, J. P. 2013. Does providing feedback on patient-reported outcomes to healthcare professionals result in better outcomes for patients? A systematic review. *Quality of Life Research* 22, 2265–2278. <https://doi.org/10.1007/s11136-013-0390-0>.

Ament, S., Gillissen, F., Moser, A., Maessen, J., Dirksen, C., von Meyenfeldt, M., & van der Weijden, T. 2017. Factors associated with sustainability of 2 quality improvement programs after achieving early implementation success. A qualitative case study. *Journal of Evaluation in Clinical Practice* 23(6):1135-1143 . <https://doi.org/10.1111/jep.12735>.

Desomer, A., Van den Heede, K., Triemstra, M., Paget, J., De Boer, D., Kohn, L., & Cleemput, I. 2018. Use of patient-reported outcome and experience measures in patient care and policy. Belgian Health Care Knowledge Centre (KCE) <https://www.nivel.nl/en/publicatie/use-patient-reported-outcome-and-experience-measures-patient-care-and-policy>.

Foster et al. 2018. The facilitators and barriers to implementing patient reported outcome measures in organisations delivering health related services: A systematic review of reviews. *Journal of Patient-Reported Outcomes* 2, 46.

References (2/2)

Tchouaket E, Dubois CA & D`Amour D. 2017. The economic burden of nurse-sensitive adverse events in 22 medical-surgical units: retrospective and matching analysis. *Journal of Advanced Nursing* 73(7), 1696-1711.

Ravelingien, J. 2020. Everything you need to know about PROMs and PREMs. Remecare. <https://www.remecare.eu/blog/everything-you-need-to-know-about-proms-and-prems>

Greenhalgh, J., Gooding, K., Gibbons, E. et al. 2018. How do patient reported outcome measures (PROMs) support clinician-patient communication and patient care? A realist synthesis. *Journal of Patient Reported Outcomes* 2, 42.

Olli, S. & Tervo-Heikkinen, T. 2020. Hoitotyönsensitiivinen laatu – katsaus kirjallisuuteen. Tutkimuksesta tiiviisti 31/2020. Terveyden ja hyvinvoinnin laitos.

Oner et al. 2020. Nursing-sensitive indicators for nursing care: A systematic review (1997–2017). *NursingOpen* 8(3), 1005-1022.

Pitkänen et al. 2018. Vaikuttavuus SOTE:ssa, suoritteista tuloksiin. White paper. Nordic Healthcare Group.

Field J, Holmes MM, Newell D. 2019. PROMs data: can it be used to make decisions for individual patients? A narrative review. *Patient Related Outcome Measurement* 10, 233-241.

Bull C, Byrnes J, Hettiarachchi R, Downes M. 2019. A systematic review of the validity and reliability of patient-reported experience measures. *Health Service Research* 54(5), 1023-1035.