

Integrating PROMs for adverse effects into clinical practice

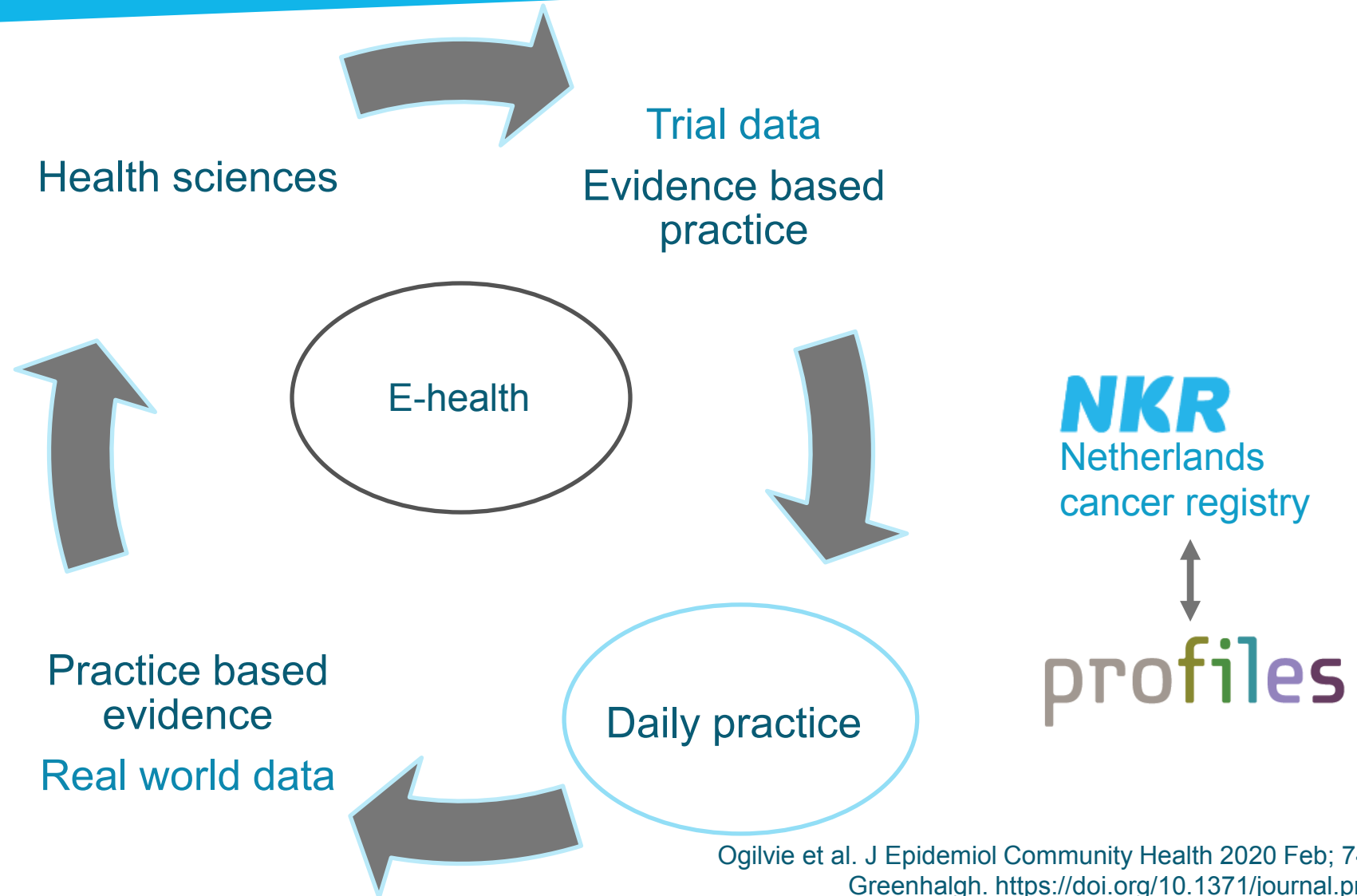
Established and new treatments, old and new toxicities

Old toxicities, new incidence and grading

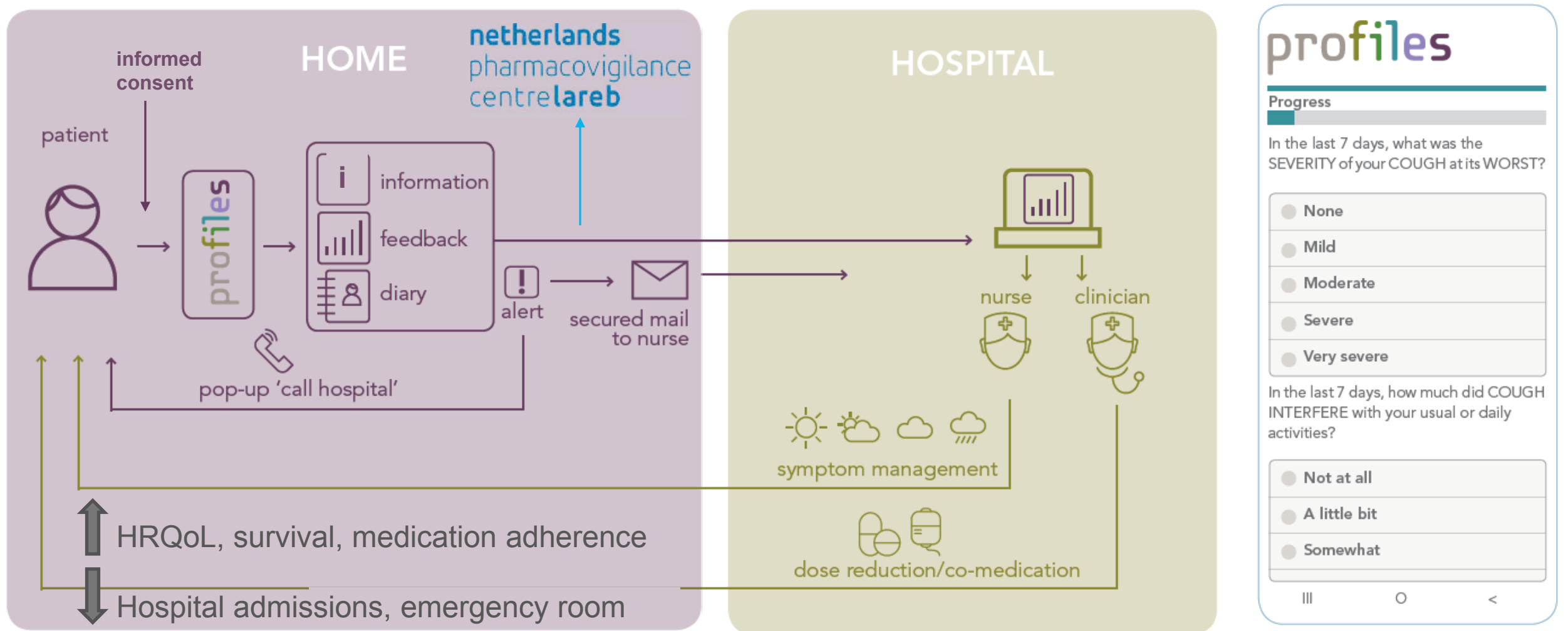
## Institutional support for projects on symptom monitoring:

- AstraZeneca
- BMS
- Boehringer-Ingelheim
- Ipsen
- MSD
- Pfizer

# PROMS in circular health care



# Monitoring Adverse Events during patient journey



# Tremendous increase telemedicine by Covid-19

**RESULTS** Of 379 planned face-to-face appointments, 283 (75%) were converted to telemedicine. *JCO Glob Oncol. 2020 Jul;6:1046-1051*

## Telemedicine During the COVID-19 Pandemic: Impact on Care for Rare Cancers

Alannah Smrke, MD<sup>1</sup>; Eugenie Younger, MD<sup>1</sup>; Roger Wilson, CBE<sup>2</sup>; Olga Husson, PhD<sup>3</sup>; Sheima Farag, MD<sup>1</sup>; Eve Merry, MBBS, MD<sup>1</sup>; Aislinn Macklin-Doherty, MBChB, MD<sup>1,3</sup>; Elena Cojocaru, MD<sup>1</sup>; Amani Arthur, MBChB, MD<sup>1,3</sup>; Charlotte Benson, MBChB, MD<sup>1</sup>; Aisha B. Miah, MBBS, MD, PhD<sup>1,3</sup>; Shane Zaidi, MD, PhD<sup>1</sup>; Spyridon Gennatas, MBChB, MD, PhD<sup>1</sup>; and Robin L. Jones, MD<sup>1,3</sup>

abstract

**PURPOSE** Many patients with cancer, often those with rare cancers such as sarcomas, travel long distances to access expert care. The COVID-19 pandemic necessitated widespread changes in delivery of cancer care, including rapid adoption of telemedicine-based care. We aimed to evaluate the impact of telemedicine on patients, clinicians, and care delivery at the Royal Marsden Hospital (RMH) Sarcoma Unit during the pandemic.

**METHODS** Data were extracted from patient records for all planned outpatient appointments at the RMH Sarcoma Unit from March 23 to April 24, 2020. Patients and clinicians completed separate questionnaires to understand their experiences.

**RESULTS** Of 379 planned face-to-face appointments, 283 (75%) were converted to telemedicine. Face-to-face appointments remained for patients who needed urgent start of therapy or performance status assessment. Patients lived on average > 1.5 hours from RMH. Patient satisfaction (n = 108) with telemedicine was high (mean, 9/10), and only 48% (n = 52/108) would not want to hear bad news using telemedicine. Clinicians found telemedicine efficient, with no associated increased workload, compared with face-to-face appointments. Clinicians indicated lack of physical examination did not often affect care provision when using telemedicine. Most clinicians (n = 17; 94%) believed telemedicine use was practice changing; congruently, 80% (n = 86/108) of patients desired some telemedicine as part of their future care, citing reduced cost and travel time.

**CONCLUSION** Telemedicine can revolutionize delivery of cancer care, particularly for patients with rare cancers who often live far away from expert centers. Our study demonstrates important patient and clinician benefits; assessment of longer-term impact on patient outcomes and health care systems is needed.

*JCO Global Oncol* 6:1046-1051. © by American Society of Clinical Oncology

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Review



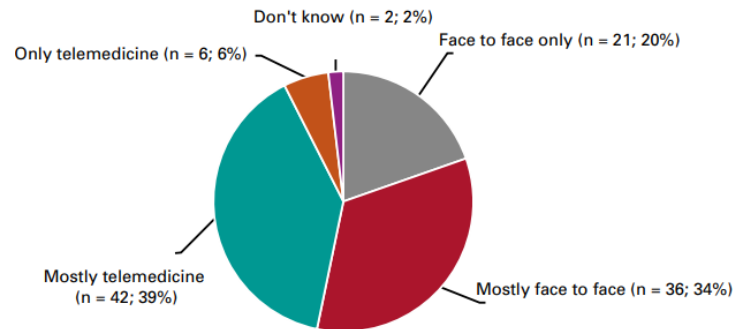
## ESMO management and treatment adapted recommendations in the COVID-19 era: colorectal cancer

Loredana Vecchione <sup>1,2</sup>, Sebastian Stintzing <sup>3</sup>, George Pentheroudakis,<sup>4</sup> Jean-Yves Douillard,<sup>5</sup> Florian Lordick <sup>6</sup>

on outcomes according to a high, medium or low priority scale, is outlined and discussed. The implementation of healthcare services using telemedicine is explored: it reveals itself as functional and effective for limiting patients' need to travel to centres and thereby has the potential to reduce diffusion of severe acute respiratory syndrome coronavirus 2. Colorectal cancer demands a considerable amount of medical resources. Therefore, the

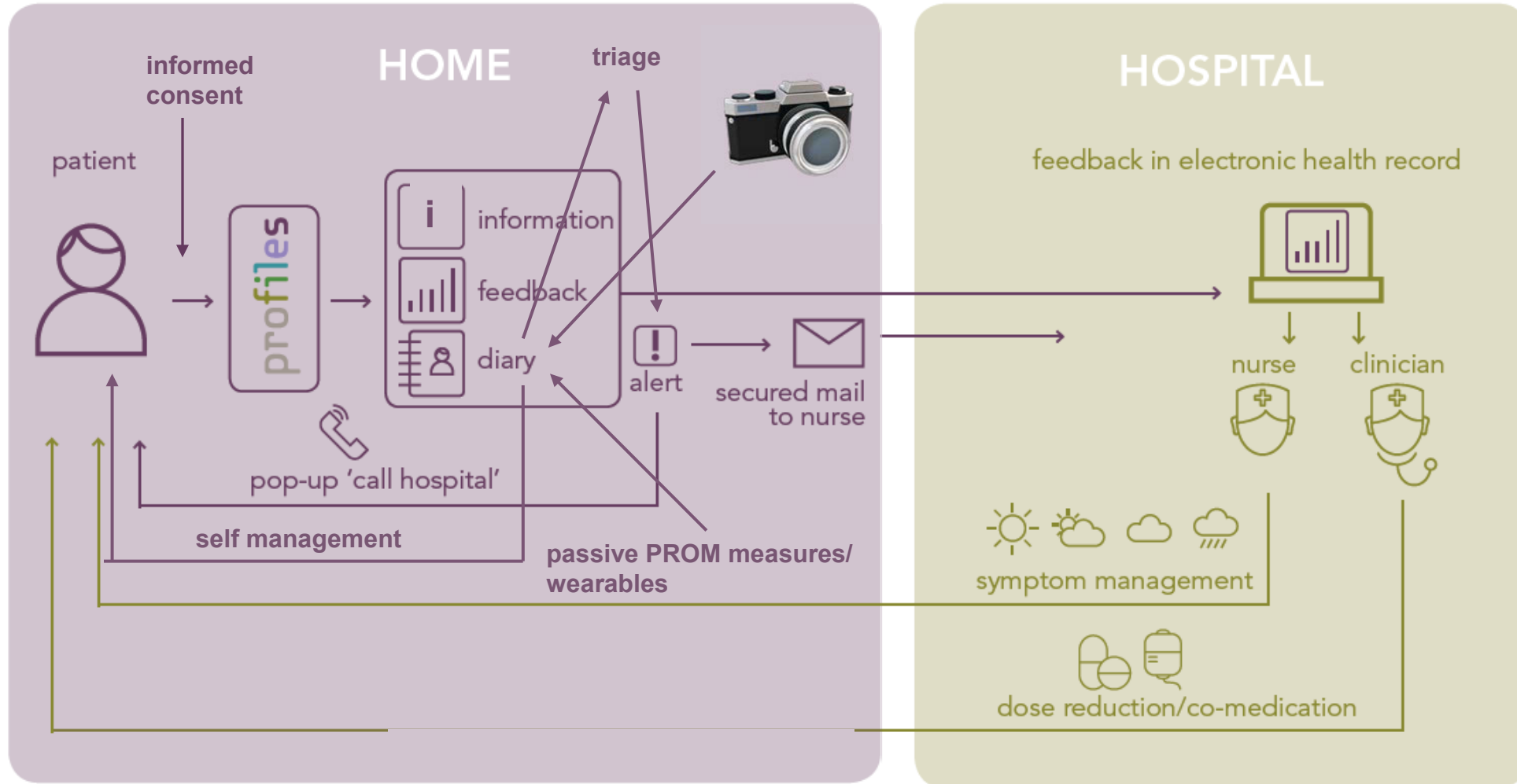
Tele  
44%

Face2Face  
54%

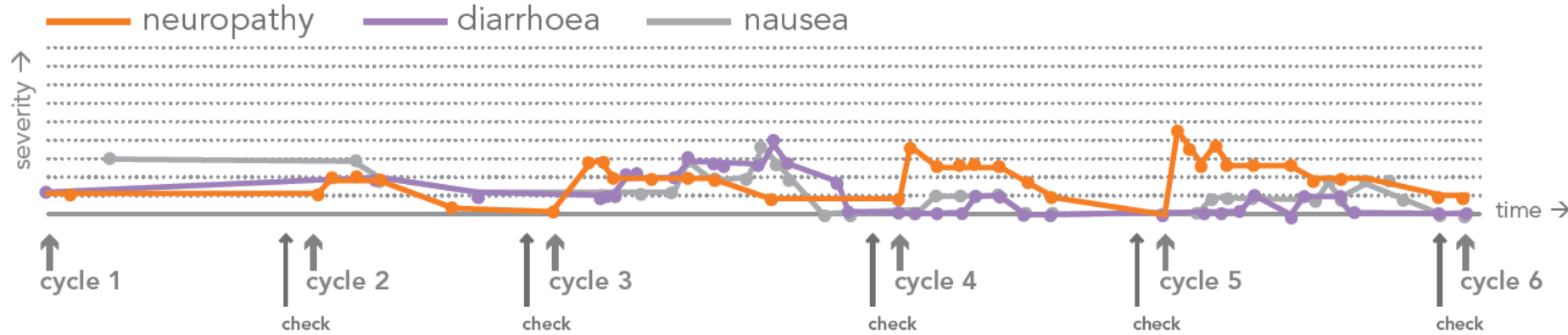


Patient preference for future appointments

# Monitoring Adverse Events during patient journey

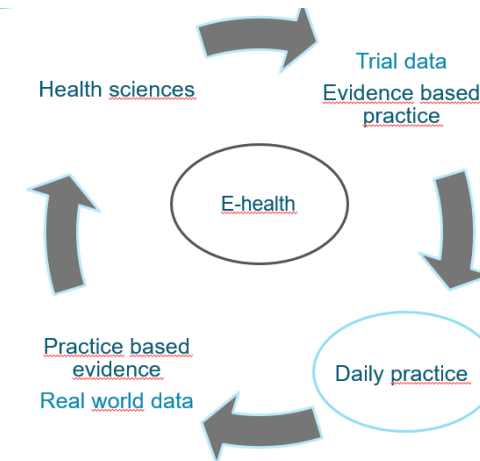


# Old toxicities, new incidence and grading

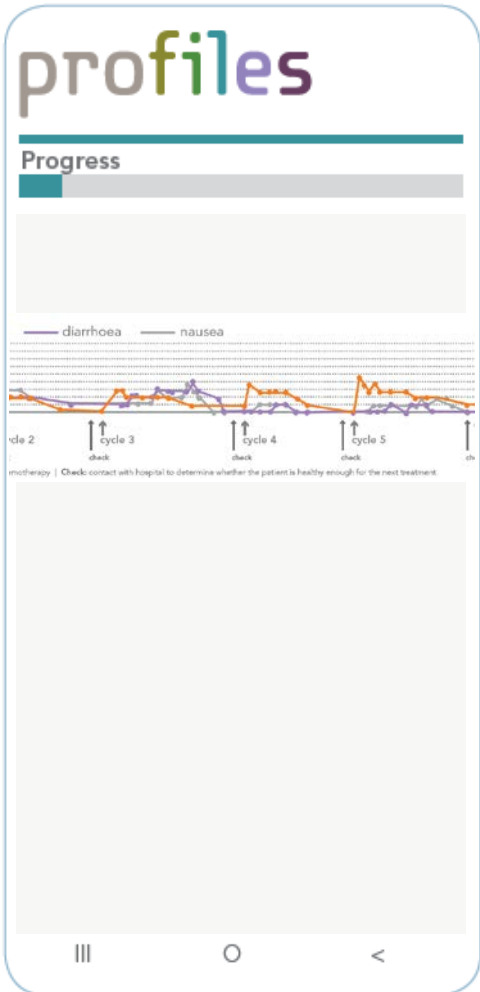


Cycle: time of treatment with chemotherapy | Check: contact with hospital to determine whether the patient is healthy enough for the next treatment

Symptom	CTCAE Max Grade 3+			PRO-CTCAE Max 3+		
	Cabo	Mito	P	Cabo	Mito	P
Constipation	3.3%	1.8%	1.00	26%	13%	0.09
Decrease appetite	1.7%	5.3%	0.36	38%	15%	0.008
Diarrhea	8.3%	1.8%	0.21	44%	11%	<0.001
Fatigue	18.0%	8.8%	0.18	36%	26%	0.30
Nausea				38%	15%	0.008
Short of breath	--	5.3%	0.11	14%	13%	1.00
Vomiting	1.7%	7.0%	0.20	12%	7%	0.52



# Using PROM Adverse Events



HOSPITAL  
V A.1

HOSPITAL  
V A.2

HOSPITAL  
V A.3

HOSPITAL  
V B

## FAIRify data: uniform language/data model

**F**  
Findable

(Information about) data should be easy to find for both humans and computers.

**A**  
Accessible

Once found, the data should be accessible in a standardized and secure way.

**I**  
Interoperable

It should be possible to integrate the data with other data and to use the data in other applications.

**R**  
Reusable

Data should be well-described so that they can be replicated or combined in different settings.

## Aggregated AE data



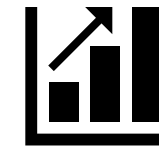
## Patient organisations



## Decision aids



## Science



## VBHC/ Benchmarking



## International projects





# Using PROM Adverse Events

**profiles**

Progress

AE	Pro-CTC
Alopecia	Grade 0
Anorexia	Grade 1
Cough	Grade 1
Epistaxis	Grade 1
Dyspnea	Grade 0
Fatigue	Grade 2
KPS	100%
Myalgia	Grade 0
Nausea	Grade 1

Alopecia	Grade 0	✓	✗
Anorexia	Grade 1	✓	✗
Cough	Grade 1	✓	✗
Epistaxis	Grade 1	✓	✗
Dyspnea	Grade 0	✓	✗
Fatigue	Grade 2	✓	✗
KPS	100%	✓	✗
Myalgia	Grade 0	✓	✗
Nausea	Grade 1	✓	✗

Grade

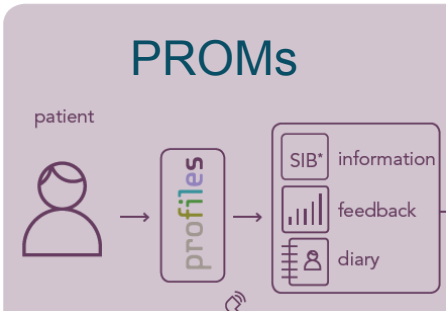
Choice for intervention

Guideline


Often underestimated by clinician

# Using PROM Adverse Events

## New AE data



## Clinical

MASCC™ MULTINATIONAL ASSOCIATION OF SUPPORTIVE CARE IN CANCER

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Practice Resources | Assessment Tools

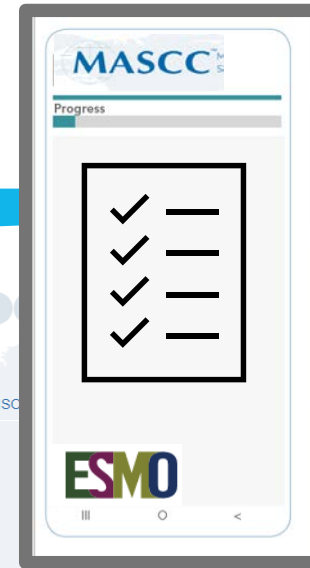
**MASCC Guidelines**  
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**Antiemetic Guidelines - Updated July 2019**

The MASCC/ESMO Antiemetic Guidelines have been updated as of July 2019. The revised guidelines are based on the Copenhagen Consensus Conference on Antiemetic Therapy, June 2015, and have been endorsed by both MASCC and ESMO. See the [MASCC/ESMO Antiemetic Guidelines](#) for the full text of the Guidelines, supporting Consensus Recommendation Papers, and the updated Guideline Slide Set.

**Mucositis Guidelines - Updated July 2019**

A major effort of the Mucositis Study Group of MASCC/ISOO has been a comprehensive review of the literature for the development of evidence-based clinical practice guidelines. The first set of MASCC/ISOO Mucositis Guidelines was published in the journal Cancer in 2004, with updates published in 2007 and 2014. The most recent update papers were first published in *Supportive Care in Cancer*.




Management of Treatment-Related Adverse Events

SYMPOSIUM • 2020

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MASCC

CME/MOC



ESMO > Guidelines

## ESMO CLINICAL PRACTICE GUIDELINES: SUPPORTIVE AND PALLIATIVE CARE

ESMO-MCBS

Pocket Guidelines

The ESMO **Clinical Practice Guidelines (CPG)** are intended to provide the user with a set of recommendations for the best standards of cancer care, based on the findings of **evidence-based medicine**.

### Latest enhanced and revised set of guidelines

Supportive and palliative care are areas of **high importance in oncology** and ESMO published Clinical Practice Guidelines on the management of a variety of issues: Constipation in advanced cancer, Delirium in Adult Cancer Patients, Diarrhoea in adult cancer patients, Management of anaemia and iron deficiency in patients with cancer, Management of infusion reactions to systemic anticancer therapy, Management of toxicities from immunotherapy, Management of febrile neutropenia, MASCC and ESMO consensus guidelines for the prevention of chemotherapy and radiotherapy-induced nausea and vomiting, Treatment of dyspnoea in advanced cancer patients, Central venous access in oncology, Management of oral and gastrointestinal mucosal injury, Management of refractory symptoms at the end of life and the use of palliative sedation, Advanced care planning in palliative care, Bone health in cancer patients, Cancer, fertility and pregnancy, Management of chemotherapy extravasation, Cardiovascular toxicity induced by chemotherapy, targeted agents and radiotherapy, Management of cancer pain, Management of venous thromboembolism in cancer patients.

The ESMO **Clinical Practice Guidelines (CPG)** are intended to provide the user with a set of recommendations for the best standards of cancer care, based on the findings of **evidence-based medicine**.

### Special Article

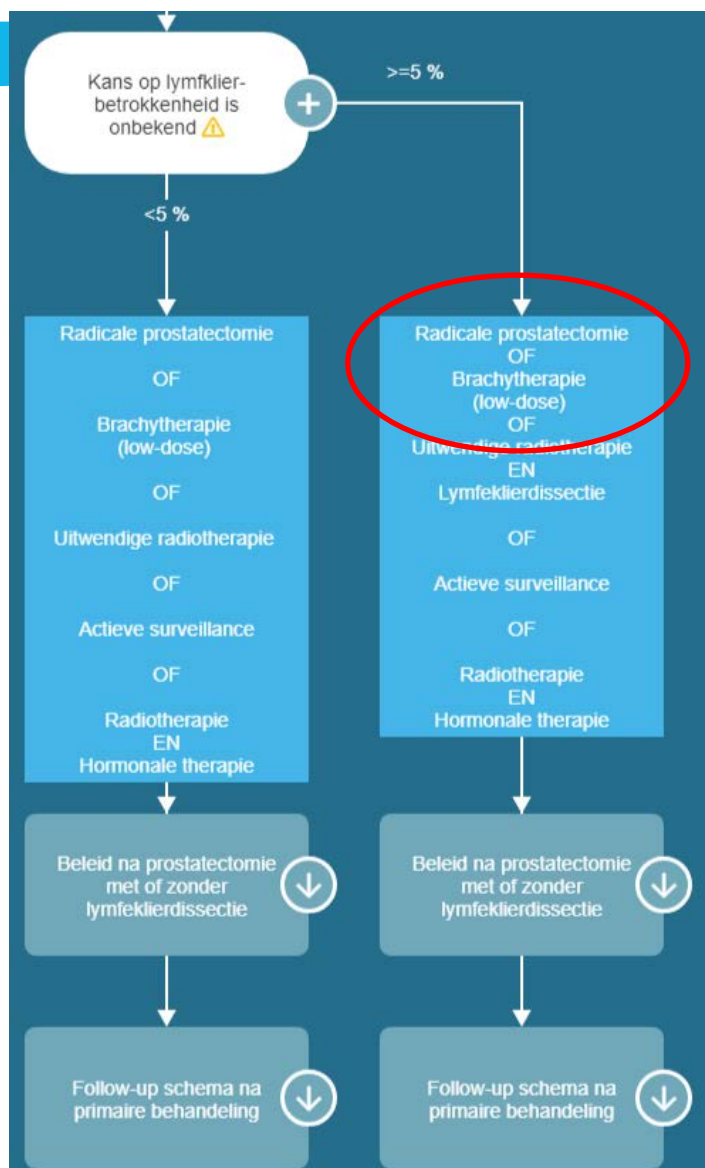
## Multinational Association of Supportive Care in Cancer (MASCC) 2020 clinical practice recommendations for the management of immune checkpoint inhibitor endocrinopathies and the role of advanced practice providers in the management of immune-mediated toxicities

Tim Cooksley, Monica Girotra, Pamela Ginex, Ruth Ann Gordon...

Pages 1-7



# Using PROM Adverse Events



Radical prostatectomy  
n=2000 (10%)

OS= 7,9 y

HRQoL (+)  
A= 15  
B= 37  
C= 83  
D= 46

AE (-)  
1= 33%  
2= 20%  
3= 5%  
4= 9%

Brachytherapy  
n=1000 (5%)

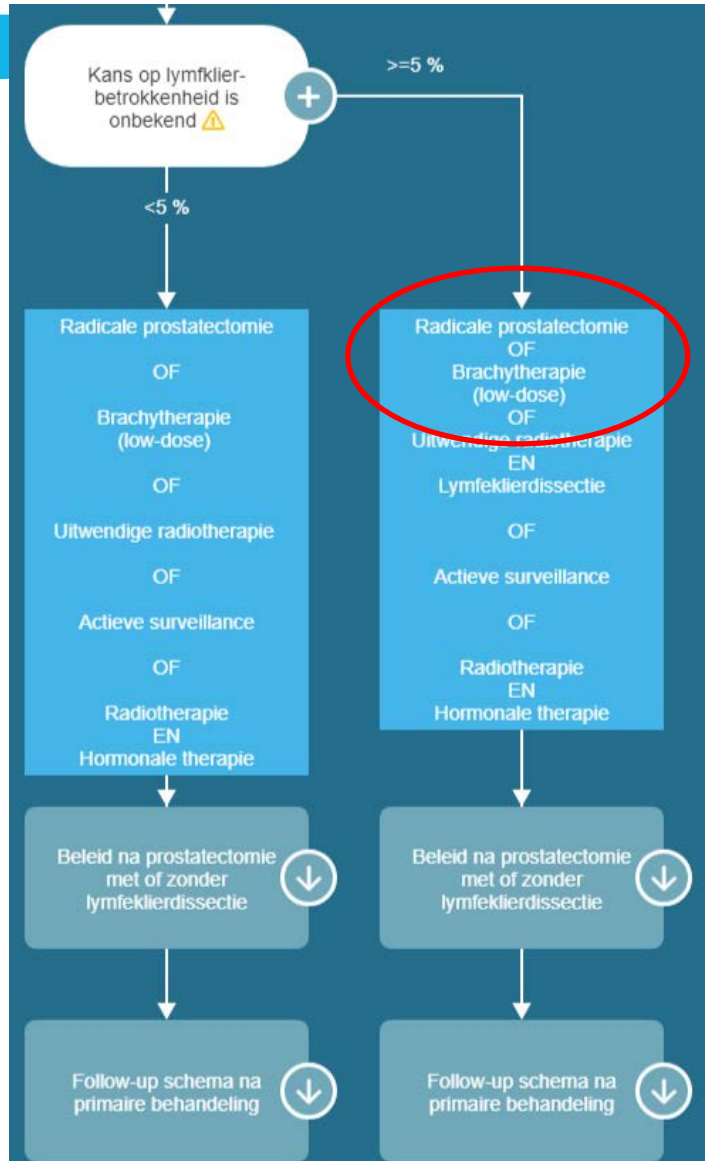
OS= 8,3 y

HRQoL (+)  
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C= 84  
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**NKR**

profiles

**NKR** profiles

# Integrating PROMs for adverse effects into clinical practice

## Practical

- Standard care continues to exist: instruct immediately call in case of e.g. fever

## Lessons learned

- Implementation AE monitoring:
  - Linkage with EHR is crucial
  - Add to workflow in hospital: discuss results, react on alerts?
- Add to medicine curriculum: why and how to use PROMs / Aes -> the new standard care

# Integrating PROMs for adverse effects into clinical practice

## Future

- Patient tailored: short PROM, 3 open AE questions (WISP instrument)
- Refining alerts: minimal but safe
- Prediction models, e.g.
  - Clinical outcomes -> recurrence/ death
  - Short term AEs -> long term symptoms/ HRQoL
  - Combinations of symptoms, not life-threatening -> (S)AEs

> [J Pain Symptom Manage. 2020 May;59\(5\):1009-1018. doi: 10.1016/j.jpainsymman.2019.12.006. Epub 2019 Dec 16.](#)

## Do Longitudinally Collected Symptom Scores Predict Time to Death in Advanced Breast Cancer: A Joint Modeling Analysis

[Suman Budhwani](#)<sup>1</sup>, [Rahim Moineddin](#)<sup>2</sup>, [Walter P Wodchis](#)<sup>3</sup>, [Camilla Zimmermann](#)<sup>4</sup>, [Doris Howell](#)

## Integrating PROMs for adverse effects into clinical practice

- App is simple and low cost tool, only effective if used during consultation
- Overview over time to detect patterns: early intervention
- Advantageous outcomes for patient: survival, less severe symptoms, HRQoL
- Lower costs?: less admissions and emergency room visits, time?
- Higher costs?: co-medication, treatment duration, time?
- Consult: direct focus on important AEs
- Better view on AE incidence/ grading
  - Enrich guidelines
  - Improve patient information

Plea for unity in digital language & don't reinvent the wheel

# MASCC/ISOO

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## SUPPORTIVE CANCER CARE

A leading international source  
of expertise dedicated to  
multidisciplinary  
RESEARCH & EDUCATION  
in Supportive Care in Cancer



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- Scholarship and award opportunities
- Access to practice guidelines, tools, & educational materials
  - \* MASCC/ESMO Antiemetic Guidelines
  - \* MASCC/ISOO Mucositis Guidelines
  - \* MASCC Antiemesis Tool (MAT)
  - \* MASCC Oral Agent Teaching Tool (MOATT)
  - \* MASCC EGFR Inhibitor Skin Toxicity Tool (MESTT)





Established and new treatments, old and new toxicities  
Old toxicities, new incidence and grading  
Real world data, new knowledge



*Supportive Care makes  
Excellent Cancer Care  
Possible*

SUPPORTIVE CARE  
MAKES EXCELLENT  
CANCER CARE POSSIBLE

**2021**  
24-26 JUNE  
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Annual Meeting on Supportive Care in Cancer

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