E-HEALTH TOOLS IN NUTRITION CHALLENGES AND OPPORTUNITES

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DIGITAL ACCESS AND USE IS GROWING RAPIDLY
"ehealth and care refers to tools and services that use information and communication technologies (ICTs) to improve prevention, diagnosis, treatment, monitoring and management of health and lifestyle. Ehealth and care has the potential to innovate and improve access to care, quality of care, and to increase the overall efficiency of the health sector."
E-HEALTH - A FEW POSSIBILITIES

Digital Information Systems

e.g. Digital Support Systems, Telehealth

e.g. National Electronic Registry Systems, Hospital Information Systems

3 POSSIBLE USES

Target Specific Cohorts and provide evidence based tailored information

Increase accessibility and efficiency of information exchange

Gain and Share Insights
OPPORTUNITIES IN NUTRITION AND ONCOCOLOGY
PATIO INFORMATION SYSTEMS

HEALTH CARE PROFESSIONAL

CUSTOMIZED INFORMATION

PATIENTS

NUTRITION INFORMATION PROVISION: ONCOCOLOGY

Careful!
Define your target population

Identify their needs!!!

Fill the information gap

Research the details on how to present the information
BEFORE YOU BEGIN RESEARCH!
WHO AND WHAT TO TARGET

INFORMATION PROVISION

Our Website has 11,000 retrievals per month

- Oct 2018: 700

Regularly check to make sure you are fulfilling your target audience's needs

Daily retrievals
TOP 10 HITS: KNOW YOUR TARGET

1. /was-essen-bei/beschwerden/bluehungen/  2,983 (18.30%)
2. /was-essen-bei/beschwerden/durchfall/  2,812 (17.25%)
3. /was-essen-bei/beschwerden/appetitlosigkeit/  1,481 (9.09%)
4. /was-essen-bei/beschwerden/geschmacksveranderungen/  1,251 (7.67%)
5. /was-essen-bei/beschwerden/veranderungen-des-speichelfusses/  1,078 (6.61%)
6. /  864 (5.39%)
7. /was-essen-bei/beschwerden/uebelkeit-und-erbrechen/  704 (4.32%)
8. /was-essen-bei/mangelernaehrung/  679 (4.17%)
9. /was-essen-bei/beschwerden/mukositis-stomatitis/  667 (4.09%)
10. /was-ist/trinknahrung/  664 (4.05%)

OPPORTUNITIES IN NUTRITION AND ONCOLOGY

Digital Support Systems, Telehealth

Art-Quelle: Icons made by Freepik and Icongeek26 from https://www.flaticon.com/
EXAMPLE: SHOULD E-HEALTH BE INTEGRATED INTO THERAPY?

Younger patients agree significantly more than old patients with the statement ($p$-value=0.017)

Also don’t forget: Use your opportunities- you may discover new Data

EXAMPLE: DON'T FORGET TO ADD A „PLUS“

Distress is significantly associated with PG-SGA. An 1 unit increase in PG-SGA leads in average to an increase in the distress score of 1.28.
E-HEALTH CAN BE COMBINED

PATIENT PROVIDES AND PROVIDER PROVIDES

1. Essen
   Wie viel haben Sie heute im Vergleich zu Ihrer üblichen gewohnten Menge gegessen?
   (Möglicherweise Bilder hochladen für Berater?)

2. Trinken
   Wie viel haben Sie heute im Vergleich zu Ihrer üblichen gewohnten Menge getrunken?

3. Allgemeinbefinden
   Wie fühlen Sie sich heute?
   Falls Allgemeinbefinden sich verändert:
   Weiter auf nächster Folie
ADVANTAGES

- You can reach a larger population and are more flexible with implementation

- Patients can fill out the information anywhere, anytime

- Feedback and support is quick

- Patients can receive feedback and Graphics

- When properly planned the data analysis is automated
Implementation of a continuously running, in-memory analysis layer, to optimize the analytical value of comprehensive oncology-related data

MOCCA: The Munich online comprehensive cancer analysis platform

Nasseh D1, Schneiderbauer S1, Langa M1, Schweizer D1, Heinemann V1, Belka C1, Cadjenovic R1, Buysse L1, Erickson N1, Müller M1, Kortüm K1, Niyazi M2, Marschner S2, Fey T1

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BIG DATA TAKES THIS........
Figure 5. A comparison of two different cohorts within the organ map module: It clearly shows different patterns of occurrence within female and male stomach cancer cases. The color saturation is linear to the occurrences with a saturation of 100% being the most affected segment.
..OR THIS

![Bar chart with data points]

910 out of 923 tumors were treated with an operation after (in median) two weeks.

333 out of 923 tumors were treated with a radiotherapy after (in median) eight weeks.

**Nutrition Therapy?**

OPPORTUNITIES ARE ENDLESS-
PROPER PRIOR PLANNING IS THE KEY
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VIELEN DANK FÜR IHRE AUFMERKSAMKEIT

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