

BD4QoL

BIG DATA FOR QUALITY OF LIFE

Newsletter #3 January '22 – June '22

1. ABOUT THE BD4QoL PROJECT

BD4QoL aims at **improving head and neck cancer survivor's Quality of Life** through person-centred monitoring, post-treatment support and personalised follow-up.

BD4QoL takes advantage of **technologies for social communication** and **unobtrusive personal monitoring** embedded in smartphones to **improve head and neck cancer survivor's Quality of Life**. Physical activity, social interactions, sleep, and health data are automatically collected by a mobile app for over two years after treatment and will be analysed to early intercept quality of life deterioration and health risks.

The project will last until December 2024. Would you like a closer look on how BD4QoL works and is implemented? See the project's presentation video: <https://youtu.be/90YmWxtytn0>

An updated version of a [leaflet](#) and of a [presentation](#) has just been released: **give it a look to know more about the first projects results!**

For more information about BD4QoL, visit: www.bd4qol.eu

2. BD4QoL NEWS&EVENTS

BD4QoL 3rd Plenary Meeting in Milan



On May 31st, 2022 the 3rd BD4QoL Plenary Meeting was hosted by the University of Milan.



The results achieved so far were presented, the first feedbacks from the prospective trial started at Casa Sollievo Della Sofferenza hospital were discussed and the activities for the next period were launched.

The BD4QoL app is completed and used for the study and the quality of life data from previous trials involving more than 3500 head and neck cancer patients from UK, Germany and Italy analysed by University of Oslo mathematicians were presented, providing insight on current quality of life determinants and patients' profiles.

BD4QoL partner DOTSOFT was awarded the Silver prize in the BOUSSIAS Cloud Computing Awards!



BD4QoL partner **DOTSOFT** was awarded the **Silver prize** in the **BOUSSIAS Cloud Computing Awards** for the **Best Cloud Solution Provider in the Industry of Healthcare!**

BOUSSIAS highlights and rewards innovative practices, technologies, and applications of companies, organizations, and IT service providers for the effective management of their business or business activities.

The Cloud Computing Awards 2022 is awarded to those who have demonstrated an outstanding track record of **continuous performance improvement** in terms of **digitization** as well as those who stand out for providing **computing/server, storage, database, networking and software services over the Internet**.

The award ceremony took place in Athens on the 25th of May 2022.

[Read](#) the details.

BD4QoL prospective clinical trial: patient enrollment started in “Casa Sollievo della Sofferenza” hospital



The “**Casa Sollievo della Sofferenza**” hospital (S. Giovanni Rotondo, Italy) started the enrolment of the **patients** who participate in the **prospective trial** for the use of the **BD4QoL platform** starting from **April 11th, 2022**.

The first 18 patients are **using the BD4QoL apps** to collect quality of life data and will be followed up for 24 months. **Patients will report their perceived quality of life** using the web-based standard questionnaires from the European Organization for the Research on Cancer (EORTC) at the enrolment and every six months as part of their follow-up visits. Two thirds of the study participants will also **collect data on their physical and social activities, sleep, and emotional status** by using the BD4QoL mobile apps.

Patients are enthusiastic and happy to participate to the experimental phase of the project. The expectations of physicians are high, and they hope that the results of the project will help patients to improve the quality of life during the surgery follow-up.



[Read](#) the details.

BD4QoL access to EU-funded Horizon Results Booster (HRB) services

BD4QoL will partner with the EU-funded H2020 [project CAPABLE](#) in **sharing results and recommendations** for the successful dissemination of **new Artificial Intelligence assisted technologies for cancer patients quality of life monitoring and support**. Thanks to the EU-funded [HRB support](#) the five projects involved in this initiative will enact shared events and activities for **awareness-raising** among cancer research and medical communities, patients' organizations and advocacy groups, healthcare policymakers and eHealth technology providers.

The five projects were funded by the European Commission under the call H2020-DTH01-2019 "Big data and Artificial Intelligence for monitoring health status and quality of life after the cancer treatment.



[Read](#) the details.

BD4QoL has been invited to join the "Cancer Survivorship-AI for well-being cluster"

BD4QoL will join the "Cancer Survivorship-AI for well-being cluster", already involving eight EU-funded projects. The initiative, promoted by EU funded project FAITH, will boost the adoption of **best practices of participatory research in Artificial Intelligence for healthcare** and well-being for the benefit of EU citizens.



[Read](#) the details.

BD4QoL mentioned during the IAG-KHT Spring Symposium "Head and neck tumours in the focus of health services research"!



The **BD4QoL project** has been **mentioned** during the **IAG-KHT Spring Symposium "Head and neck tumours in the focus of health services research"** organised by the **German Cancer Society Interdisciplinary Group on head and neck cancer** and held on April 27th, 2022, at the Berlin VKU Congress center.

BD4QoL has been cited by **Prof. Dr. Andrea Rau** who discussed **head and neck tumours** as focus of health services research and the challenges in the status quo in outcome analyses of Head and neck tumours.

[Read](#) the details.

BD4QoL Project is online on the AIOM website!

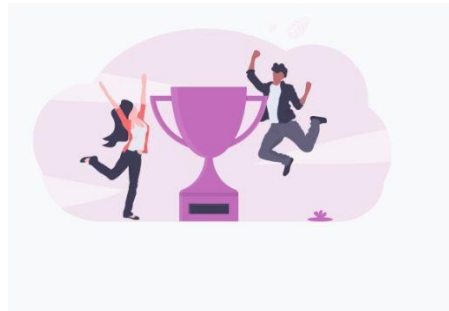


The **Clinical Study** carried out in the context of the **BD4QoL Project** - *Multicentre randomised clinical trial to assess quality of life using non-invasive electronic devices during post-curative follow-up for head and neck cancers* – is now **online on the AIOM (Associazione Italiana di Oncologia Medica) website!**

[Read](#) the details.

Highlighting innovations: the BD4QoL project in the European Commission's Innovation Radar!

The EU Innovation Radar Platform



The **innovation** “BD4QoL Point of Care (PoC) support tool for healthcare professionals following up Head and Neck Cancer (HNC) survivors” developed in the project has been selected by the **European Commission's Innovation Radar!**

The EU Innovation Radar, through its **publicly accessible platform**, collects information about innovations developed in the context of EU-funded projects. Details about the BD4QoL project and the innovation selected will appear on the EU Innovation Radar platform soon, together with the names of the BD4QoL partners identified as 'Key Innovators' in the **BD4QoL PoC**.

[Read](#) the details.

SAVE THE DATE:
the “Make Sense campaign” takes place from 19 to 23 September 2022



MAKESENSECAMPAIGN

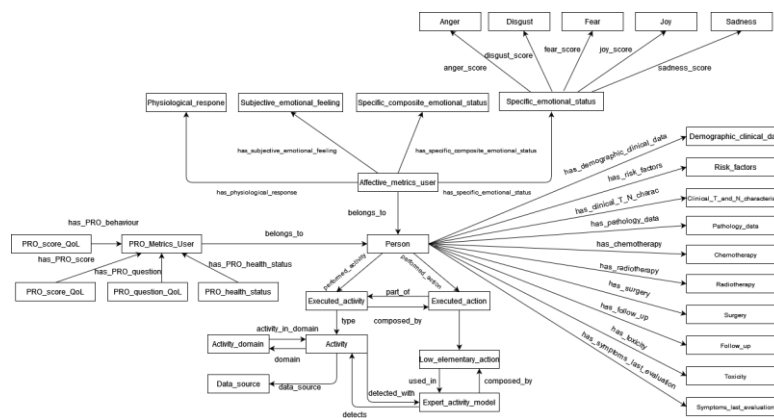
19-23 September 2022

The *Make Sense* campaign is a unique and exciting initiative by the **European Head and Neck Society (EHNS)**, that brings medical experts together from many disciplines, including head and neck cancer specialists and patient organizations, involved in any aspect related to head and neck cancer.

The *Make Sense* campaign aims to raise awareness of head and neck cancer and ultimately improve outcomes for patients with the disease by **driving awareness and education; encouraging early diagnosis and referral; and improving care of patients.**

3. BD4QoL PUBLICATIONS

Participation in the Splitech 2022 conference. Paper title: An Ontology for Quality of Life Modeling in Head and Neck Cancer



The University of Deusto team presented in the [Splitech 2022](#) conference the **BD4QoL Ontology**, which provides a comprehensive and integrated data model for Head and Neck Cancer survivors. The presented ontology models **several relevant areas of the knowledge domain**: the patients clinical and demographic data, the questionnaires commonly used to ascertain their quality of life and the related behavioral and emotional traits that can be used to infer the quality of life. This ontology serves as an interoperability tool for other ICT systems dealing with the data from Head and Neck Cancer and the related software infrastructure.

[Read](#) the details

Oral presentation at IUPESM WORLD CONGRESS



UPM presented the workflow management system of the BD4QoL project and expectations from the beta version at the [IUPESM WORLD CONGRESS](#). In the work it was presented a **Workflow Management System (WfMS)** using not only clinical records but also QoL related data, embedding these data sources into clinical trial protocols. Within the context of the BD4QoL European project, an innovative **Point of Care (PoC)** application to support HNC survivor's follow-up has been created.

[Read](#) the details.

Do you want to know more about the first outputs of the BD4QoL project? Have a look at [deliverables published](#) by BD4QoL project so far!

4. BD4QoL Scientific Papers

BD4QoL partner DEUSTO published a paper on "Behavior Modeling for a Beacon-Based Indoor Location System"

A paper from the BD4QoL partner DEUSTO, "Behavior Modeling for a Beacon-Based Indoor Location System", has been published in the peer-reviewed, open access, ***Sensors Journal***, including part of the work carried out in the hybrid activity recognition system of the project.

The paper illustrates a comparison performed between two different approaches to track a person in indoor environments using a locating system, with a smartphone and a smartwatch as monitoring devices. It also evaluates the system's performance, and presents a novel location prediction system and a soft-attention mechanism (able to predict user's next location with 67% accuracy).

Read the [full paper](#)

First results for the BD4QoL semantic-location based point of interest identification mechanism published

A paper from the BD4QoL partner DEUSTO, "Location Based Indoor and Outdoor Lightweight Activity Recognition System", has been published in the peer-reviewed, open access, ***Electronics Journal***, including the final version of the data integration and fusion modules for activity recognition.

The paper presents a system able to infer user activities in indoor and outdoor environments using Global Positioning System (GPS) data together with open data sources such as OpenStreetMaps (OSM) to analyse the user's daily activities, requiring a minimal infrastructure.

Read the [full paper](#)



5. BD4QoL activities on social network

BD4QoL social channels are constantly updated with all the **latest news**. Follow us for more updates!

- [Twitter](#)
- [Instagram](#)
- [LinkedIn](#)
- [YouTube](#)