



ADVOCATE NEWS

“ We are here to launch an innovative project with the potential to impact the oral health of populations not only across Europe but globally ”

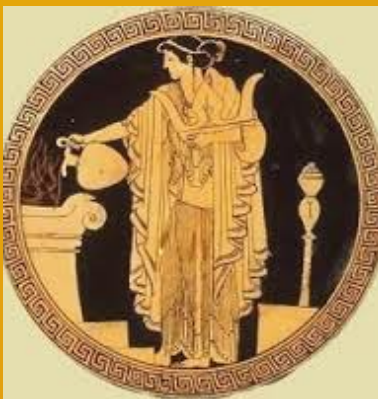


Sir Alan Langlands, Vice Chancellor, University of Leeds

MARCH 2016

www.advocateoralhealth.com

SO WHAT EXACTLY IS A DELPHI STUDY?



The Delphi method or study is a structured communication technique or method, originally developed as a systematic, interactive forecasting method which relies on a panel of experts.

The experts answer questionnaires in two or more rounds.

After each round, a facilitator or change agent provides an anonymous summary of the experts' forecasts from the previous round as well as the reasons they provided for their judgments.

Thus, experts are encouraged to revise their earlier answers in light of the replies of other members of their panel.

It is believed that during this process the range of the answers will decrease and the group will converge towards the "correct" answer.

Finally, the process is stopped after a predefined stop criterion (e.g. number of rounds, achievement of consensus, stability of results) and the mean or median scores of the final rounds determine the results.

Source: Wikipedia

SEE YOU IN THE 'WORLD CAFE'

Study topics set to be discussed in small groups

A CONFIRMATORY meeting using an approach known as 'World Café' is being organized in order to finalize the list of important topics for the core set of oral health measures.

This approach is aimed at collaborative and interactive dialogue and sharing knowledge in group conversations.

At the meeting, topics derived from the Delphi study will be discussed in small groups (consisting of practitioners, patients, policy makers and health insurance representatives) followed by voting on the resulting set of measures.

The Delphi study was conducted between December 2015 and February 2016 and consisted of two rounds.

Through the network of the ADVOCATE partners, participants were recruited from the six EU Member States.

Participants were general dental practitioners, dental specialists, patients, and people working in dental policy or the dental insurance sector.

A total of 58 participants (around 10 from each country)

were invited to take part in the study.

The two rounds of Delphi have resulted in a list of 38 topics for the core set of oral health measures, which have been categorized into 6 groups:

- Information about attendance (for example, 'reason for dental visit', 'interval of dental check-up')
- Symptoms and diagnosis (for example, 'current symptoms', 'x-rays', 'periodontal examination')
- Health behaviours (for example, 'tooth brushing', 'smoking')
- Oral treatments (for example, 'fillings', 'extractions', 're-treatment')
- Oral prevention (for example, 'fissure sealants', 'professional cleaning', 'oral hygiene advice')
- Patients' perceptions (for example, 'satisfaction with oral function', 'shared decision making')

In order to collect information on oral healthcare, we need to have a set of 'measures' (or indicators) that cover all relevant aspects of providing and receiving dental services.

This could include information on diagnostic and risk management, the balance between restorative and preventive treatment, patient communication, oral health outcomes and organisational aspects of practice.

There is a growing public interest in the EU to improve oral healthcare delivery and oral health in general. At present, there are concerns that the quality of oral healthcare is not as transparent as one would like and that there may be unwarranted variation in treatments provided in different health systems and between dental professionals.

So from the perspective of transparency on quality there is a need to begin documenting and monitoring dental practice performance in a systematic way.

Such information on performance will give patients insight into the decisions that are made by the dentist, and it will help creating a solid foundation for better informed decisions about oral healthcare and shared decision making.

Furthermore, such information has the potential to be useful to dentists - with feedback on what is currently happening in their dental

continued on page 3

WHAT'S IN THOSE WORK PACKAGES? READ ON ...



Professor Helen Whelton

The ADVOCATE project is coordinated at the University of Leeds, a member of the prestigious Russell Group of universities in the UK.

Leeds is a centre of world leading research and a major centre for Big Data and Medical Informatics: collecting health data and analysing it to inform health research and decision making.

Professor Helen Whelton, Dean of the School of Dentistry at the University of Leeds, is the lead applicant for this grant and has a shared vision for improving oral health and quality of life for the consumers of oral health care in the EU.

She shares this vision with the other 10 academics and commercial partners in this European Commission funded, HORIZON2020, research consortium.

Helen was, including other things, a founding member of the Global Oral Health Inequalities Research Network and past president of the International Association for Dental Research.

She is supported in work package 1 in Leeds by Dr. Anita Blakeston, who has a long work history in business management and more recently gained a PhD in physics.

Also, very important to the smooth running of the project is Amy Whitehead, an archaeologist and artist by training. Amy forms the backbone of the project support team and also uses her artistic abilities to design and manage the project's digital media. Together they support and facilitate the delivery of the project goals. They are responsible for helping communication within the consortium and to translate the aspirations within the grant application into real work outputs.

The outputs are called "deliverables" and "milestones" and they help break the workload into manageable pieces across the four years. The project team thus provides an interface between the consortium members and the EU office to ensure that all the work is delivered and reported on time and the legal rules set out by the EU are properly followed and observed.

To contact Work Package leaders use their emails as follows:

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The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 635183.

Team players: (l-r) Heather Leggett, Anita Blakeston, Julia Csikar and Amy Whitehead.



The work stream for WP2 consists of three elements which inform and interlink with the other ADVOCATE work packages.

The first is the **identification of key oral health care stakeholders**, these organisations and individuals will be invited to participate in research across most of the work packages. We have compiled a list of UK stakeholders and will soon be gathering information from each of the other ADVOCATE countries.

The second element is the **profiling of primary oral health care systems** over the past 50 years. We have established what the literature in this area can tell us and found that there are many information gaps.

We will be asking our key stakeholders in each of the ADVOCATE countries to help fill in these gaps using a template which we are developing but before we do this, to make sure that we are asking them the right questions, we will conduct focus groups in England and Ireland with insurers and oral health care teams. We have secured ethical approval for these in the UK (and Ireland soon).

The report that we produce will be important to help WP3's lead Stefan Listl to understand the nature and extent of oral health care data which are available to him for his team's work.

The third element of our work in WP2 is to explore, across all of the ADVOCATE countries, the **barriers and facilitators to oral health care**.

We started with a review of the literature in this area and are preparing to undertake focus groups in all of the countries to investigate stakeholders' perspectives of the oral health care provision in each of their systems with a special focus on enablers for preventative care.

The results of these focus groups will help us to develop a questionnaire to

explore the views of a much larger group of stakeholders. We are at the stage of having received ethical approval for the work within the UK and are securing permissions in the other ADVOCATE countries.

The final element of WP2 will be a large scale questionnaire to find out members of the public and oral health care teams' **preferences and perspectives of their country's oral health care system(s)**.

The findings of this task will allow us to identify the most valued elements of the different oral health care services and the barriers and enablers to increasing preventively focused services.

WP2 leader is professor Gail Douglas from the University of Leeds School of Dentistry, Chair and Head of the Department of Dental Public Health.

As well as her dentistry qualifications, Gail has a BSc in medical psychology, a Masters degree in Public Health and a PhD in Cariology. After NHS speciality training in Dental Public Health, she became director of the Caries Control Research Programme at the Dental Health Services Research Unit in Dundee.

She moved to Leeds to take up her current role in 2009. Her research experience is in the fields of health services research, epidemiology and cariology.

Most of her current portfolio of work takes place in the primary dental care setting.

She was Chair of the University's Dental Research Ethics Committee for four years and is the Regional Training Programme Director and past Chair of the UK Speciality Advisory Committee for Dental Public Health Training.

Gail's team includes qualitative researcher Julia Csikar, research assistant Karen Vinall and mixed methods researcher Heather Leggett; they work with ADVOCATE project manager Anita Blakeston and Amy Whitehead research support secretary.

HEIDELBERG – WORKING TO BRIDGE THE GAP

The WP3 team members at Heidelberg University are: LEFT TO RIGHT: Frank Gabel; Christian Haux; Jutta Küpper-Nybelen; Stefan Listl; Anna-Lena Trescher; Tanja Schamma (not pictured)



Work Package Three (WP3) led by Stefan Listl, bridges the gap between the high complexity of individual-level administrative insurance data from various countries and provision of tangible information for decision makers (patients, dentists, health insurers, health policy).

WP3 is currently acquiring and processing data to transform it into indicators that allow easy visualization of dental care outcomes in ADVOCATE's electronic dashboard system.

The dashboard is being developed in collaboration with Work Package Four (WP4) and Work Package Five (WP5) and will draw on administrative data sources as well as a software application that provides patient reported measures.

Identification of indicators for WP5 started with a literature review, followed by an expert

workshop in Frankfurt (October 30th 2015), and produced a long list of potential measures.

The first round of the Delphi successfully took place in December 2015 and facilitated consideration of 85 potential measures with respect to their suitability as indicators.

The second round of the Delphi is designed to further refine and prioritize suitable indicators and was completed in March 2016.

After the development of indicators, WP3 will exploit various administrative data sources to derive empirical insights into the impacts of provider payment and patient co-payment.

Finally, WP3 will conduct an economic evaluation in order to estimate the value for money gained through alternative health system designs as examined in the ADVOCATE project.

Stefan Listl is Director of the Translational Health Economics Group and Extraordinary Professor in the Department of Conservative

Dentistry at Heidelberg University. He is Co-Principal-Investigator of the ADVOCATE project and the lead of WP3. He has been a core member of the International Centre for Oral Health Inequalities Research and Policy at University College London and a MEA Fellow of the Max Planck Institute for Social Law and Social Policy.

He contributes to Harvard University's Malaysia Health Systems Reform Project as a consultant in collaboration with the ADA Health Policy Institute.

Stefan was a Co-Principal Investigator of research funded by the US National Institutes of Health and a Visiting Professor at the Centre for Health Economics and Policy Analysis at McMaster University, Canada.

His research interests include payment systems for health professionals, intervention points to tackle health inequalities, needs-based health workforce planning, improvement of methods for health economic evaluation (cost-effectiveness and beyond), and the use of administrative data for enhanced health systems management.

continued from p 1

practice it will be possible to compare their own practice with their peers and identify areas where there may be room for improvement.

Policy makers may use such information on an aggregate level to inform decision-making on oral health policy and the provision of dental care.

At present, there is no such standardised and agreed set of measures available.

Therefore, with relevant stakeholders from the six EU Member States, including patients, dental providers, oral health insurers and policymakers, ADVOCATE aims to develop a list of core oral health measures collaboratively.

ADVOCATE Work Packages 3 and 5 are working on the development of

oral health measures. Delphi methodology was used, which is a procedure to create consensus between relevant stakeholders through structured conversations.

In this Delphi, we aimed to achieve consensus on the question: "What are measures that provide useful information about the practice performance of dental professionals and the oral health of their patients?"

Throughout the ADVOCATE project, the resulting set of oral health measures will be used to analyse information from two data sources: in the context of big data analyses (WP3) this concerns the claims data from health insurance and in the context of the field studies (WP5) this concerns the patient

reported data collected through questionnaires at the dental practice.

The Delphi study was carried out on an online platform (Synmind) and consisted of a questionnaire and a discussion process.

In the first round of Delphi, participants were presented with a list of topics that could potentially be relevant for measuring oral healthcare.

This initial list of topics was compiled on the basis of a literature search and further refined through conversations and discussions with dentists and ADVOCATE representatives.

For each topic, participants were asked to score their agreement (on a four-point scale from 'strongly agree' to 'strongly disagree') on whether this is an important topic for the set of oral

health measures, and to provide a comment on the reason for their decision.

They were also encouraged to suggest additional relevant topics that were missing from the initial list. Furthermore, participants were asked to engage in an online discussion with other participants to create consensus on the important topics.

After the first round of Delphi, the responses of the participants were analysed and the list of topics for the oral health measures was revised according to their input.

A second round of Delphi followed the same process as before, where the participants were asked again to score their agreement and comment on the revised list of topics.

People involved in WP5 are: Geert van der Heijden, Neal Maskrey, Fatiha Baadoudi and Denise Duijster.

People involved in WP3 are: Stefan Listl, Anna-Lena Trescher, Frank Gabel.

BIG DATA EXPO

30 SEPTEMBER & 1 OKTOBER 2015

JAARBEURS UTRECHT

By Harry Peaker (Data Scientist) at Aridhia Informatics, Edinburgh.

Aridhia is listed in Britain's Hot 100 Talent 2014/15 handbook published by British Private Equity & Venture Capital Association (BVCA)

Hi Everyone,

Hello from the Netherlands after Aridhia and ADVOCATE's recent midweek trip to the Big Data Expo.

Wednesday 30th September

Once I arrived in the Netherlands it became clear that the size of the event was larger than I had anticipated. When I asked for a taxi to Jaarbeurs, the driver replied "to which building?"

The Jaarbeurs complex was huge, housing stands from many household names and there was even a 'Predict your Cocktail' area.

Between 9 am and 11am at the Aridhia/Vancis stand the atmosphere was calm and this gave us a chance to look around at some of the other exhibitors at the event.

Amazon, Microsoft and Cisco were all represented with the usual claims that surround big data analysis.

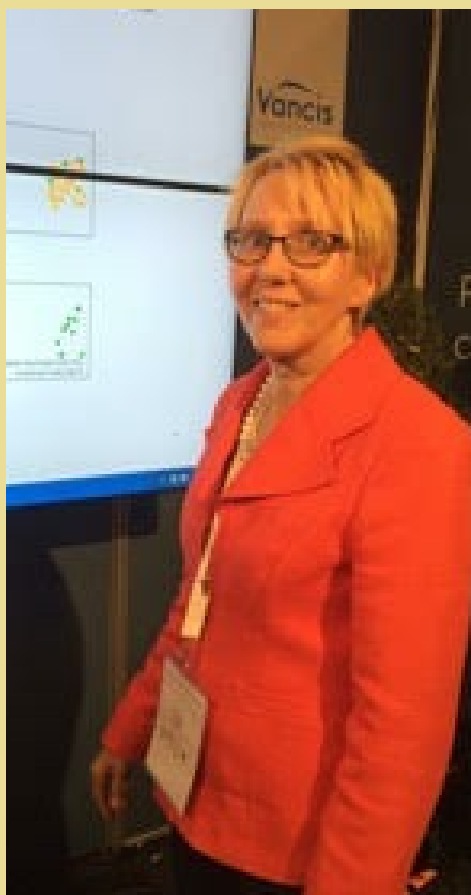
After 11am we decided to switch to some live demos that our Data Science Team have been building up in preparation for this and several other events.

Timing this with the exodus from the keynote speaking rooms directly in front of our stand seemed to do the trick as we began receiving a steady stream of people drawn in by the key words 'prediction' and 'healthcare' paired with our model simulation up on the screens.

Thursday 1st October

I met with Anita Blakeston (our ADVOCATE PM) who was surprised to find that she was a keynote speaker (with a VIP badge!) presenting with our chief executive, Chris Roche later that day.

She was very interested to hear how we were getting on and building up some of the dashboard for the ADVOCATE project. I also had a chance to give her a tour of the platform at our stand before people began to arrive.



Anita Blakeston

Using a mix of our demos, once again, to attract visitors to our stand and to spark conversions, I had a few interesting discussions with people around our genomics mini-app and diabetes dashboarding simulations.

The most promising conversation was with a couple of guys involved in tracking the progress of patients through the healthcare system.

Chris was on hand to give them a walkthrough of our London Cancer Pathways work which fits very nicely with their interests, before I spoke a bit more about our ideas of bringing a predictive element into patient tracking.

At 2pm we had a bit of a calm before the storm while Chris, Eric Heemskerk (Commercial Director, Vancis) and Anita gave their keynote speech.

Interest kept us busy until the end of the day around 5pm.

Finally, it is worth noting that BI Consultants was the only stand at the event, aside from ours, where I was given a live demo of their software.

The ADVOCATE challenge

By Anita Blakeston

The intended outcomes of the ADVOCATE research will be quantitative and qualitative indicators, evidence for new or improved patient-centered, prevention oriented, safe and efficient models for dental health care systems and services.

It will also provide evidence to be used by policy makers and decision makers to improve the health and care systems.

The outcomes will be achieved by involving universities, public sector and private sector organisations, dental health providers, patients and the public.

Between these parties there will be intensive information exchange along with the engagement of stakeholders, to establish a key set of indicators. Data will be collected from 8 European healthcare databases. It will be supported by patient and public involvement (PPI) activities including focus groups and web-based questionnaires in the early part of the project.

Supporting these data collection activities there is a dissemination plan which will ensure that the project and its results are shared with as wide an audience as possible with a legacy that allows performance data to be collected on an ongoing basis.

This challenging project has been active since May 2015 and good progress has been made in all of the packages of work.

The three key research areas of collecting insurance data, gathering expert opinion on oral health measures (the Delphi process) and the literature review of the history of the European health systems, are all underway.

A second major area of focus is to establish how information governance (ethical approvals and data processing law) requirements will be complied with when utilising data and interacting with stakeholders. An independent legal and ethics committee has been appointed which will review the first documentation early in 2016.

Supporting this research work the strategies for dissemination of the results, and the processes for reporting to the funding body, have been established.

Anita is Project Manager, ADVOCATE