This year, the Alpbach Health Symposium brought together eleven digital pioneers from across Europe to share stories of the challenges and successes of innovating within the healthcare sector. The pioneers were chosen from over one hundred and ten applications as representing some of the most exciting and, potentially, most impactful digital health innovations that are emerging.

To help move beyond speaker format this session used highly participatory approaches to ensure that the full learning of all the stories could be captured and that the vast range of experience amongst the participants could also be fed in. The facilitation was led by Phil Cass and Ursula Hillbrand using Art of Participatory Leadership hosting methods, and the team included a number of European Forum Alpbach participants who had participated in hosting skills training only a few days earlier.

Between 150 and 200 people attended the session. They all played an active role in listening to the pioneer stories, discerning key themes across the stories and fully engaging in a dialogue process to identify suggestions for the Advisory Committee to support the advancement of innovation.

Digital Pioneers Storytelling

(Picture: Maria Noisterning)

Splitting into eleven separate groups each pioneer told their story to the group of participants that wanted to hear their story.

**Dexhelpp** – Decision Support for Health Policy and Planning (Niki Popper)

**Active@home** – Playful training for people with Dementia (Josef Steiner)

**Ipso Eyecare** – A human-powered empathy engine at scale (Inge Missmahl)

**Healthbank** – A citizen-owned health data transaction platform (Reto Schegg)

**GivMed** – Help others using your smartphone: medicine donations refined (Thanasis Vratimos)

**MyMind** – Leveraging Technology to Innovate the Landscape of mental health care (Krystian Fikert)

**AnneEli** – Multilingual digital assistance for a healthy pregnancy (Nicole Neuberger)

**XMedx** – Online Consultancy from Physicians (Christof Pabinger)

**Be My Eyes** – Connecting the Visually Impaired with seeing people (Christian Erfurt)

**Video Interpreting in the health sector** (Feldin Smajlovic)

**Dacadoo** – Health and Lifestyle coordinator (Lukas Ammann)

Participants were invited to listen to the story using a particular lens or thread.

The threads were:

- From the perspective of the storyteller what is innovative in this project/story?
- Where do I see the possibility of scalability in this story?
After hearing the story, those listening to the story agreed three to five key insights.

- What do I hear in this story that could be relevant to other contexts?
- What were the challenges identified in the story that needed to be overcome?
- How does this innovation support the intended end user?
- In addition, some listeners could listen without a particular lens.

Innovation

Key messages / highlights: Digital innovation represents a massive reduction of costs while increasing global reach. It supports direct (patient-physician-support staff) and lateral (patient-to-patient) connectivity.

Pioneer stories highlighted the far wider applicability of their innovative approaches, such as global accessibility 24h a day – sometimes as simple as via a single click on an app – as well as reduced costs in terms of finances, resources and time intensity. At the same time a far more “wholesome” (“ganzheitlicher”) approach becomes possible.

The use of the digital technologies that have been developed allows for the creation of new networks and possibilities of sharing by linking a vast array of individuals from different areas, and across and among patients, physicians, support staff or other areas.

Scalability

Key messages / highlights: Across many pioneer stories, scalability is a key advantage. While many projects started small, some have already connected hundreds of thousands of individuals: Transcending national, disciplinary or sectoral borders in the health system, as well as probably spilling over in other areas outside of the health system.

The results of the pioneers’ work could be up-scaled on many different levels. The most common was the geographic scale (from country to continent to globe), sectors (patients, doctors, industry), different demographics, and across different health areas (such as an app produced to address a certain disease could be re-programmed to be used in another case as well).

Furthermore, insights gained could also perhaps be transferred to other areas outside of the health-system as well, such as the labor market.

Transfer to other contexts

Key messages / highlights: While applying to digital technologies, many innovations of pioneer stories do have a “platform potential”, thus being used for different purposes, areas and sectors.

Several innovations do have a “platform character”: While originally developed for a certain medical situation, such as mental health, they could be re-applied and re-fined, such as to become usable for very rare diseases. This includes being often independently applicable of the respective cultural or social context.

The concept of “sharing economy” starts to appear in the health system, as the pioneer stories highlight, with sharing of data, insights, experiences and even medications among patients, physicians and others.

The pioneer stories highlight the possibility to include more aspects, such as other actors like patient organisations, to integrate multiple processes, or becoming accessible for purposes of education and training.

A key issue with transferring to other contexts outside of the immediate use is, of course, data protection and integrity.

Challenges

Key messages / highlights: While innovative on many fronts, the pioneer stories also highlighted the many challenges which need to be overcome. This boils down sometimes to simply finding the necessary resources, but sometimes it requires re-thinking of patient treatment and even parts of the health system as whole – which requires acceptance by all those involved, and protection from misuse. A critical challenge, therefore, is also the question of “digital literacy”: The ability to use and understand the respective technologies appropriately may require learning and additional qualifications.

As in many areas, a key challenge has been acquiring the necessary resource for seed funding, piloting and testing.

The use of digital technologies requires digital literacy (such as physicians being qualified to apply new technologies correctly, but also patients being able to use and understand the respective apps and digital data correctly), as well as availability and accessibility to internet connections and the respective technologies.

While many “smart” technologies and approaches are developed, they, of course, require a sustainable, “smart” business model.
The use of vast amounts of data requires the ability to harmonize and handle them consistently, and raises questions about data security and protection for misuse.

Though many pioneer stories showed initial success, the question of scalability remains, as large structures such as the health system can be slow to adapt. It will require a paradigm shift and acceptance of different approaches, methods and perspectives compared to “traditional treatments”, by physicians as well as patients.

In contrast to the sharing of costs as part of the sharing economy, the sharing of medication raises a number of new issues, such as risks of abuse or liability on questions of the appropriateness.

Empowerment

Key messages / highlights: Transforming a patient from a passive receiver of a treatment to an active participant in the healing process is one of the empowering potentials highlighted in the pioneer stories. At the same time, additional data, approaches and capacities may allow for better analysis, precise treatment, and reduced risks of mistakes.

Self-determination, inclusion and participation of the patients, but also physicians, through innovations were increased. This includes the ability to give patients more control over their own life, despite serious conditions, and doing so in a resource-saving way.

By focusing on the individual needs of the patient more strongly, more tailored treatments can be designed and applied. At the same time, precision of the diagnosis and treatment increases the security of the patient, but also for the physician by making mistakes less likely through better analysis and research.

The ubiquitous availability and data and sharing it with the different individuals and sectors increases the transparency and also promotes equity.

In order to deepen the learning from the pioneer stories and to bring in the expertise and knowledge of everyone in the room a World Café process was used to support dialogue.

Sitting in small groups which included participants, pioneers and Advisory Committee members people were asked the questions:

‘What newness have I heard that should be promoted?’

Insights included:

- The need to take a step back and understand the problems before innovating
- Technology is a creative disruption

Conversational Circles

Participant’s then moved to a new table and were asked the question:

‘Based on your conversations this afternoon, what are your group’s 2-3 best suggestions for the advancement of innovations within healthcare for the benefit of us all?’

Most tables identified up to three suggestions and these were clustered, themed and developed by the facilitation team.
A number of themes emerged with some clear support for areas and action.

Politics and policy framework
There is an array of political issues that need to be dealt with in order to advance innovation across Europe.

Healthcare innovation needs to be removed from political considerations and health care innovators need to work without political constraints
Build legal frameworks that would advance professional collaborations across regions. Perhaps consider 'health system laboratory regions'
Review cross border policies with a view toward unifications including seeking EU developing broad legal and reimbursement framework for web based health services
Reduce bureaucracy and regulation when it comes to common medical procedures and other things like regulation of donated medicines

Volunteering
Find ways to support healthcare volunteerism (example pre-global 24/7 volunteer service for the impaired)

Democratise Health Care
Bottom-up pressure and data transparency create a need to act towards system change.
Health care issues need to be brought into public discourse in a transparent way considering ethical principles e.g. through transparent dialogue between innovators such as start-ups and the public sector.

Funding
The current reimbursement system blocks innovation; this could be changed towards the provision of financial incentives for innovative ideas. Micro-charity should be enabled through technology.

Research and Evaluation
It is important to evaluate current projects and focus on outcomes and implementation.
It could be worthwhile to document and rate best practice

Technology
Create online platforms to connect databases and aggregate data internationally. Also generate benefits for individual users, as people need more sources of information at more stages (health literacy, second opinions) to make informed decisions. Make sure data is citizen owned.
Use digital technologies to optimize existing services and treatments. Better connect patients with support (doctors, therapists, interpreters, volunteer helpers), often abroad by means of digital technology. Support meaningful human connections between professionals and patients to better achieve patient-centered care.
Health services can be of low barrier type by making the process more anonymous/private.

Benefit from outsourcing services digitally e.g. video translation can be created.
Address and clarify how to balance data protection with the benefits of big data. For example, create a new international entity to implement and monitor sensitive aggregation of data.

Equity
Successful innovation needs to be for everyone, not only those who can afford it.

Additional principles and values also surfaced from across the conversations:
- increase/assurance of quality
- maximum transparency
- clear responsibilities
- evidenced – based