Iproceedings



International Conference:

Digital Health beyond COVID-19: Lessons Learned, Copenhagen, August 29-30, 2022

Introduction

This PDF contains abstracts for the international conference: Digital Health beyond COVID-19: Lessons Learned, Copenhagen, August 29-30, 2022.

The abstracts are from speakers in the conference that presents discussions, views and panel discussion. All abstracts are reviewed by a scientific committee for the conference.

Thank you so much to the Novo Nordisk Foundation for supporting the conference.

You can read about the conference at this link: https://www.labwelfaretech.com/ttrn/cph2022/

Best Regards

Birthe Dinesen

Birthe Dinescr

Professor and Head of the conference

Digital Health at Lundbeck: Learnings from clinical trials before, during and after COVID-19

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Background:

With recent advances in Digital Health Technologies and data analysis tools, new tools have found their way into the toolbox of clinical measures for monitoring of drug safety and efficacy in clinical trials. In our team (at a Danish Pharmaceutical company), we have worked with Digital Health Technologies (sensor systems, smartphone applications and wearables) for some years, but during Covid-19, a fast adaptation of remote patient visits, decentralized trials and Digital Health Technologies was needed to adapt to a rapidly changing world.

Objective:

This presentation will provide a perspective on Digital Health from an industry point of view, with a focus on clinical development and how Digital Health is transforming the way we conduct clinical trials. Furthermore, this presentation will include a high-level overview of how our Digital Health team goes from early idea to successful implementation, including an overview of past experiences, current challenges, and future possibilities.

Methods:

Digital Health has shown to be a new toolbox that enables us to more frequently and objectively monitor patients with less burden than in a clinic setting. However, caution should be taken to ensure alignment with regulatory bodies, considerations regarding the validation of the technology and how to analyze the data.

Results:

Previous and current projects utilizing Digital Health Technologies have already taught us important lessons but enabled us to successfully implement a wide array of Digital Health tools in clinical trials, providing us with novel data and new insights.

Conclusion:

Including Digital Health tools in a clinical trial involves many considerations and operational aspects, which can only be successfully overcome by a cross-functional team, external knowledge sharing and innovative problem solving.

Digital health technologies on prescription beyond Covid-19

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Background:

The COVID-19 pandemic has sparked the transition towards digital health even more. In Denmark we have seen a tremendous rise in the usage of digital health technologies during the pandemic, mainly driven in fields of tele-communications with new healthapps appearing and a big potential for digital health technologies in several aspects of the patient journey in regard to communication, screening, diagnostics, treatment and monitoring. During the last decade technologies embedded in smartphones and wearable devices have revolutionized many aspects of healthcare as we know them. Illuminating and exemplifying the coming of "P4 medicine" where healthcare is to become more predictive, preventive, personalized and participatory.

Objective:

To discuss the potential of prescribing digitals health technologies for future healthcare

Methods:

In this panel discussion we will have representation from patients advocates, healthcare professionals, authorities as well as startup-and technology developers. These four pillars of health will debate how digital health technologies have affected healthcare during the pandemic and will also discuss what it can bring to the future.

Results:

With a focus on the current status of digital healthcare in Denmark we will discuss how digital health technologies can be implemented on a broader scale in the Danish healthcare system and abroad. We will also pay attention to the development of digital health technologies on prescription, and with the European trends that healthcare professionals, often general practitioners will have the ability to prescribe or refer their patients to a suitable digital health technology within several fields of healthcare. Perspectives will be brought to the German DiGA model, where German general practitioners can prescribe healthapps, and how this is affecting Danish healthcare.

Conclusion:

Sparked by the COVID-19 pandemic, digital health technologies have become a more important part of healthcare, and it holds even bigger potential.

Hospitals as Innovation Hubs

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Digitalization is increasing rapidly across all sectors, including healthcare. Digital innovation can greatly increase the healthcare sector's reactivity and resilience e.g. by increasing speed and accuracy of diagnosis and optimizing resources. However, the uptake of new technologies is difficult for several reasons, many of which center around lack of communication between industry and clinicians, and the lack of clinical insights of digital solution providers. It is therefore important to create the conditions to facilitate the uptake of digital solutions for healthcare (and hospitals in particular) by focusing on co-development between clinicians and solution providers, thus ensuring that solutions meet clinical requirements and provide scientifically validated data.

Innovation departments integrated within hospitals are in a unique position to provide a better overview of clinical needs, contribute to change management toward innovation, and support implementation and adoption of new healthcare technologies. They are able to bridge the dialogue between healthcare workers and technology providers, thus ensuring that both parties' needs and constrains are aligned. Understanding the complexity of introducing new technologies often requires looking at the development project from different perspectives, such as impact on the patient's journey and clinical workflow. Innovation units can play an important role in creating this overview and ensuring the activation of relevant disciplines and sectors accordingly.

Hospitals can therefore act as innovation hubs, by bringing knowledge about relevant clinical needs to the industry, facilitating clinical collaboration proposed by companies, and ultimately guiding faster and smoother implementation of novel digital technologies into clinical practice.

How can universities use surrogate entrepreneurs to foster interdisciplinary innovation and entrepreneurship?

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Background:

The onset of the COVID-19 pandemic has underlined that human life comes first. In order to protect human life and public health, a variety of stakeholders started a race against SARS-CoV-2; to develop vaccines, provide antibody testing, and design emergency-use 3D-printed ventilators. In this effort, the traditional boundaries between industries and scientific disciplines have been bended, making clearer than ever that breaking the scientific silos and achieving interdisciplinary innovation can address health-related challenges and emergencies in a much better way. A natural question to ask is: how can we achieve this inter-disciplinary innovation in the long run to improve the health and save the life of so many people?

Objective:

To achieve inter-disciplinary innovation and entrepreneurship in this realm, there is a growing consensus that at least three groups of people need to work together: life-science scientists, researchers from engineering disciplines, and people who come outside the research (university) environment and bring along valuable business-related experience and competences—the so-called "surrogate entrepreneurs". The objective of this presentation is to provide a framework that will guide the matchmaking of surrogate entrepreneurs with researchers and that will guide collaboration across scientific disciplines.

Methods:

The presentation will be based on an extensive literature review of the role of surrogate entrepreneurs in university-based startups, and on ongoing conceptual and empirical research that explores the cross-fertilization of research from different disciplines and assesses the inclination of researchers to team up with surrogate entrepreneurs, in order to bring inventions to market.

Results - Conclusions:

A number of insights will be generated: Are researchers inclined to team-up with surrogate entrepreneurs? How can they achieve inter-disciplinary innovation and entrepreneurship? Which surrogate entrepreneurs have the right profile to bring inter-disciplinary inventions to market?