CONEDIG: A Roadmap to the Future of Digital Health Education
Outline

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Outline

• Title: Strategic development of Consortium of Educational Institutions in Digital Health (CONEDIG)
  ➢ Status of the initiative;
  ➢ Expectations of the consortium;
  ➢ The roadmap of activities.

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Status of digital technology for healthcare services:

- How digital technology for health services has revolutionized and is integral to the healthcare system;
- Access to the internet, development of smart devices, ‘tech savvy’ generation;
- Digital health technology to reduce costs and tailor healthcare to the needs of a person;
- Government initiatives to include digital health into health systems.
Digital Health Education

- **Digital health field:** A unique blend of the knowledge of medicine and information technology;

- **Branch of Informatics:**
  Subjects include: health informatics, medical informatics, clinical health informatics and public health informatics

Content of subjects:

- Delivery of digital healthcare, use of mobile medical applications, digital therapeutics, telehealth, wearable devices, sensors and digital biomarkers;
- Evaluate digital tools and systems with regard to data protection, regulatory frameworks and ethics.
Mosch et al (2019) indicate an urgent need for digital health literacy and skills among health professionals

- Defined a gap between the overall willingness of students to become key players in a meaningful digitisation of healthcare and the competencies and skills that are acquired during their courses

- *Need for formal education in digital health*
Digital Health Education

**Built-in** (didactic courses, laboratory exercises, rotations or clinical experiences)

**Postgraduate education** (residency or fellowship positions, continuing medical education, learning suites, certificate programs)

**Elective track process**

**Capstone project** as an output from an elective track process or an adjunctive degree, done through outside partners

**Adjunctive degrees** (e.g. masters) following completion of didactic courses and formal education

Timothy Dy Aungst and Ravi Patel (2020)
Digital Health Education

- Haag M et al (2018) cite the **challenges in adapting university teaching** of digital health technology:

  - Insufficient infrastructure
  - Lack of training opportunities for teachers
  - Additional burden on teachers
  - Unfavorable legal framework conditions that impede innovation
Digital Health Education

- Timothy Dy Aungst and Ravi Patel (2020):
  - Lack of digital health experts with backgrounds in education
  - Foster relationships between ongoing educational programs
  - Promote exchange of knowledge, ideas, experiences and best practices
  - Use virtual teaching methods
  - International outreach program on digital health
  - Creation of new organizations or societies
Brief history of initiative

In November 2019, the International Society for Telemedicine and eHealth (ISfTeH)

- Develop educational programs in digital health with a view to contribute to a controlled and efficient growth of ‘Global Digital Health Education’ (GDHE);
- Need to setup a “Consortium” of “Educational Institutions”
- Unite academic institutions with an interest in GDHE – to continuously explore, analyze and disseminate existing benchmarks and best practices in GDHE

A working group of common interests was created under the title “Consortium of Educational Institutions in Digital Health” “CONEDIG”
Brief history of initiative

- **Independent body** operating on a **not-for-profit basis** under the ISfTeH;
- **Aim of consolidating digital health education** for initial training and continuous training;
- **Creation of a set of education programs** for digital health and the evaluation of existing programs in digital health;
- **Ownership of a common lexicon** in digital health.

**CONEDIG’s purpose** is to assist the Consortium’s partners to coordinate their programs around GDHE issues (including Telemedicine, eHealth, Mobile Health, Medical Informatics, Bio-Medical Engineering, etc.) such as teaching, research & development as well as practical applications in view of initial graduation and post-graduation.
Vision, mission, activities

1. **Develop** ‘a la carte’ training courses in digital health

2. **Create** an evaluation and accreditation framework for digital health programs

3. **Inform** societies, invite students to participate in study programs
CONEDIG will adopt the following:

Academic activities:
- Support / create a framework of developing new and updating existing curricula in digital health;
- Support / create a framework of evaluation or accreditation of study programs in digital health;
- Support / create generic modular study courses on various topics in digital health

Develop guidelines, recommendations of good international practices in digital health
Partner institutions

• Five founding members:
  ➜ Universidade do Estado do Rio de Janeiro (UERJ) Rio de Janeiro State University, Brazil
  ➜ Université de Bordeaux, France
  ➜ Deggendorf Institute of Technology, European Campus Rottal-Inn (DIT-ECRI), Germany
  ➜ Peoples’ Friendship University of Russia (RUDN), Russian Federation
  ➜ University of KwaZulu Natal (UKZN), South Africa

Partnership will expand and sustain the use of telemedicine and digital health in member countries and other countries
Partner institutions

- Develop generic CME awareness courses
- Develop common modules and courses in GDHE
- Share experience of education in existing digital health courses
- Consolidate a harmonized approach in transforming knowledge
- Develop criteria for evaluation of the results of educational programs
- Exchange of similar initiatives, teaching and international research
Goal and Objectives

**Goals of CONEDIG:**

1. To stimulate a collaboration between educational institutions delivering programs in digital health
2. To explore and benchmark existing synergies in the field
3. To come up with further development possibilities of the programs
4. To define career opportunities
5. To develop a common promotional campaign

- Conduct regular meetings to discuss the goals, best practices, international cooperation, setup annual workshops
Expectations of the Consortium

1. Recognition of the necessity to approach the health needs of each country
2. Participation and collaboration in international research
3. Train and qualify people to work in GDHE around the world
4. Global meeting place of academics in the digital health field with experts sharing knowledge, expertise, content and personnel for education and research
5. Creation of an international teaching network
Expected Activities, Deliverables

Short-term goals:

- Development, provision and promotion of:
  - Joint ad hoc courses
  - Qualifications and project applications (e.g. CME, CPD)
  As e-learning activities in practical training

- Development of internationally acceptable basic introductory, awareness courses
  Consortium in concert with member institutions
  Courses that are not country and legislation specific

- Preparation of a register of qualifications, courses, modules and their content
  Evidence that the consortium is functional
Expected Activities, Deliverables

Short-term goals:

Assistance to medical institutions to:
Implement telemedicine as a discipline (subject) in their curriculum

Training and support of:
- Health care professionals
- Medical students (undergraduate postgraduate)
  In digital health education to deliver improved patient care

Sharing and exchange of digital health personnel to:
Teach and instruct courses in member institutions
Expected Activities, Deliverables

Short-term goals:

- Finding and securing:
  - Funding
  - Sponsorship
  - Partnerships

- Increase membership:
  - Inclusion of 33% of ISfTeH institutional members

- Attracting member institutions from:
  - Countries that are not ISfTeH national members
Expected Activities, Deliverables

Medium-term goals:

Increase:
- Global influence
- Provide leadership
- Support all those involved in digital health

Expand the consortium
To include institutions from 66% of the ISfTeH institutional members

Create an association
on the lines of an ‘Accreditation Commission of Education Institutions in Digital Health’
Expected Activities, Deliverables

Medium-term goals:

- Advance evaluation of best practices
- &
- Scaling up creation and dissemination of ad hoc study courses

- Promote standards in digital health

- Award of joint qualifications along with ongoing joint research applications and successful completion of joint research programs
Expected Activities, Deliverables

**Long-term goals:**

- Consolidate what has been implemented in the short and medium term
- Consortium is recognized and visible in the field of training and the use of digital health
- Funding and Sustainability:
  - Initial working budget
  - Close links should be fostered with the industry
Conclusion

• For the successful implementation and incorporation of digital health technology into the healthcare system, it is imperative that an association that reflects the formal education of digital health is created;

• As a consortium of educational institutions in digital health, CONEDIG will serve as a global platform for advancing digital health as well as telemedicine education;

• Integral to this idea involves the sharing of expertise for joint educational and research projects;

➢ With the resources of experience, enthusiasm, existing courses and infrastructure that the founding institutions can provide, CONEDIG will be an indispensable tool in GDHE.
Thank you