HEALTH TECHNOLOGY AS COMMONS: TRUSTABLE, AFFORDABLE, ADAPTABLE

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6 in 10 humans still have no access to care, or do not adhere to it, despite rising investments.¹⁻³ Alcohol-based hand rub⁴ and WikiMed⁵ illustrate how creating freely reproducible equipment and software with communities can: save millions of lives, increase integrity, cut costs by 90%. Cooperation-driven care is the only way to realize the 2030 agenda in time: health for everyone.⁶

We presente nine alternatives to the dominant proprietary excluding innovation model, to drive development towards a responsible, solidar society.

Hand prosthesis to ease one's daily life

A prosthetic hand usually costs 6-10 K€. Enable brings together over 30000 volunteers who design and distribute 3D-printed prostheses to vulnerable people. www.enablingthefuture.org + www.gre-nable.fr + www.enablenepal.org



Drugs produced with integrity

India has a pioneer approach in pharmaceutics. Open Source Drug Discovery brings together 7900 people who collectively develop open-source, low-cost therapies for neglected diseases such as tuberculosis, malaria, leishmaniasis. www.osdd.net



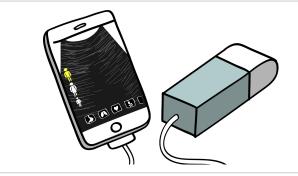
Open-sourcing MRI could save the German healthcare over 200 M€ yearly⁷

Medical imaging is crucial in diagnosing, understanding and treating a number of diseases. The Open Source Imaging initiative gathers experts to create MRI scanners that can be built and maintained for a fraction of the cost of current MRIs. www.opensourceimaging.org



Ultrasound scanner in the pocket

One in three persons have access to medical imaging. A portable ultrasound device usually costs 8-22 K€. EchOpen develops a probe to visualise organs on a smartphone. It helps guide the diagnosis and make patient management more fluid. www.echopen.org



Detecting seizures with wearables

50 million people have epilepsy, 1/3 are drug resistant. Epileptic seizures lead to daily stress and social exclusion. We develop wearables and software to log and analyse biological data. www.aura.healthcare + www.openhumans.org + www.cri-paris.org



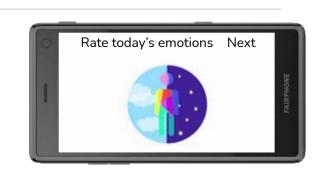
Making air pollution a visible matter

In Switzerland, one in seven premature deaths is linked to air pollution. LogAir helps everyone to map the air quality (fine particles) using cheap devices. Generating data can help avoid bad air quality, but can also motivate policy changes for healthier cities. www.logair.io



Collecting and visualizing data

MindLogger makes it easy for anyone to collect, analyze, and visualize data using mobile devices. Users are able to build their own activities, such as surveys, quizzes, digital diaries, or cognitive tasks. www.mindlogger.org



Transforming gesture into sound

Fuga explores the potential of emerging technologies for preventing, diagnosing, monitoring, and rehabilitating mental health disorders in line with recent advances in psychiatry and neuroscience. www.hoosh.space/fuga



Taking care of our breathing through play

Worldwide, one child in ten has asthma, one senior in twenty has COPD, a disease caused by pollution and smoking. Breathing Games is developing a multiplayer game and a breath sensor to promote respiratory health. www.breathinggames.net



We also discuss ageing, public policies, quality systems, and cryptocurrencies.

Videos and more: www.openvillage.ch · Cite: www.doi.org/10.5281/zenodo.4327587

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6. United Nations. #Envision2030 Goal 3: Good Health and Well-being.
7. Winter et al. Open Source Medical Devices for Innovation, Education and Global Health. 2018.







¹ WHO and World Bank. Half the world lacks access to essential health services... 2018.

² WHO. Adherence to long-term therapies: evidence for action. 2003.3. World Bank. Current health expenditure (% of GDP). 2020.

^{4.} WHO. Guide to Local Production: WHO-recommended Handrub Formulations.

^{5.} WikiMedia. Wiki Project Med/App. 2020.