I have a dream that one day humans will unite and say: We hold this truth to be self-evident that what serves the right to health is a common good.

I have a dream that one day medical data, research data for health and longevity will be accessible to all and will allow for a longer and healthier life, with more solidarity.

I have a dream that those who were sick and those who were overwhelmed by bureaucracy, regulations and financial or psychological factors will find sisters and brothers to be all together more resilient, happier and proud to help each other.

I have a dream that the hell of privatized and dispersed knowledge will be transformed into an Eden of knowledge sharing to enable a much longer healthy life for all.

Text inspired by "I have a dream" by Martin Luther King.

Theme of the month: Sharing health data and longevity

Our health data

Of all the personal information stored in computerized form, but also often in paper format, information relating to health and all our biological data is among the most numerous, the most sensitive and the most useful.

Since the beginning of the history of medicine, healthcare has been delivered through collective knowledge, individual experiences, often inaccurate beliefs and knowledge of the patient's condition.

It is only relatively recently that patient data have become an important part of the field of knowledge, not only for the treatment of individuals themselves, but also for medical research.

How to share health data?

Since the end of the 20th century, the concern to protect privacy has been growing. Initially, the measures taken were aimed at, and resulted in, preventing abuses. Today, the combination
of regulations and practices relating to medical data and, more broadly, all the regulations and practices concerning the privacy of citizens has resulted in:

- The citizen does not have access to their own medical data in a simple way.
- The citizen does not have the opportunity to participate in medical experimentation and share knowledge scientifically, even if he or she wishes to do so out of personal or collective interest and even if he or she has given explicit informed consent.
- Researchers do not have access to the detailed health data of most citizens.
- Medical data is often the subject of opaque and self-interested commercial transactions.
- The development of research using artificial intelligence and "massive medical data" is slowed down, as biased and sold data potentially contains more inaccuracies.

It is perfectly normal that citizens are protected from illegal uses of private data that could be harmful to them. But the protection should stop there. It is immoral, and it should be illegal, for data useful to public health to be withheld from researchers, when this does not cause harm to the people from whom the data originates.

In an ideal world, the fact that medical data may have value for research should not give rise to financial transactions except in relation to the cost of the operations required to make the data available.

The current situation does not ensure the protection of privacy, it prohibits almost totally, in fact and in law, the effective sharing of data. As far as classical medicine, medical records, relations with our health institutions, pharmaceutical information, etc. are concerned, we only have restricted and temporary access to them. The lack of sharing to prevent and reduce the impact of diseases in the future is particularly regrettable for information concerning the elderly (indicators of neurological diseases, detection of falls, ...).

**Some private and public organizations sharing data**

New tools, such as the mass processing of health data and artificial intelligence, will enable significant progress in patient support, evaluation and choice of treatments and management of the healthcare system. This is why many players are investing in this field.

- **Health Data Hub** (HDH) is a health data sharing platform launched in December 2019 in France. Its objective is to promote the use and multiplication of the possibilities for exploiting health data, particularly in the areas of research, support for healthcare personnel, healthcare system management, patient monitoring and information. The HDH enables the development of new techniques, particularly those related to AI.
methods. It also has a role in promoting innovation in the use of health data.

- A similar project exists in Germany: the Medical Informatics Initiative (MII). The French and German projects share the same objectives but differ in terms of methodologies. The HDH project is based on a top-down approach and focuses on a shared computing infrastructure, providing tools and services to accelerate projects between data producers and users. The MII project is based on a bottom-up approach and relies on four consortia comprising teaching hospitals, universities and private partners.

- Apple places a lot of emphasis on health and wellness features with its Apple Watch. The latest model can measure heart rate, warn of falls and perform an electrocardiogram (ECG) thanks to an optical sensor. Unfortunately, both the Apple firm and firms offering similar services do not share the information.

- The X-Prize Foundation promotes the integration of healthcare data. Breaking down barriers to data access while respecting privacy and security principles is a huge challenge and a tremendous opportunity. Standardized, aggregated and granular patient data that can be shared across systems is the foundation for low-cost, high-quality healthcare, including enabling front-line healthcare systems to function optimally and efficiently. In addition, this data is essential for A.I. algorithms to deliver information.

Promote health uses, prevent illegitimate uses

Your insurer, your banker, the government knows a lot about you. Google, Facebook, your employer and your neighbor too. They don't normally use it for illegitimate purposes.

What is needed first of all is to prohibit the illegitimate use of information and ensure effective sanctions in the event of harmful use of health data (as of any other data for that matter). We must prevent data on sex, origins, health status, etc., from being used by private or public companies to discriminate. It must not be permitted to sell, provide services or even contact people in a differentiated manner in other contexts than scientific research and health care. Illegitimate use must be strictly prohibited. Violation of the prohibition should be sanctioned by measures including full compensation of victims and prevention of recurrence.

An important aspect of health data being considered a public good, not a private good, is that it would be a provision that could not be opted out of. There would be no clause allowing health data to be sold, leased, exchanged, .... This prohibition would apply both to the patient data of a health institution and to an individual's own data.

Of course, individual medical data should not be accessible to the merely curious. For everything not directly necessary for scientific research, a system of anonymization (or pseudonymization) should be implemented.
Conclusion: Sharing to improve longevity and resilience

It is now technically possible to share health data. The legal and logistical framework would be relatively easy to set up.

Imagine a world where health data cannot be used commercially, but only for your health and that of others. Imagine a world where the sharing of medical data would be systematic, instantaneous and usable by artificial intelligence. You and your doctor would know in seconds what medications people your age, in your region, with your medical characteristics are taking, what the best treatment is, based on knowledge gathered from around the world.

Imagine what should be the basic logic followed. Just as you can easily find on the internet what your favorite politician or singer did in July 2007, you could in one click find the medication you took three years ago, the blood test, the vaccinations, which you had done 15 years ago, the comparison with other populations, your allergies, predispositions, ...

Imagine that all this data will allow tomorrow's collective health research to be much more efficient, and clinical trials to be safer and faster.

Imagine a much longer and healthier life for everyone who wants it.

This month's good news: Towards restoring fertility in menopausal women

A pilot study, conducted between 2017 and 2019 at the Genesis Fertility Clinic in Athens, Greece, enabled postmenopausal women to give birth. The experiment involved 30 women who had not had a period for more than a year, and 80% of them experienced an improvement in their hormone levels and returned to a regular menstrual cycle. Among them, four became pregnant and three had children. Fertility is said to have been restored with blood transfusions using the ovarian Platelet-Rich Plasma (PRP) method.

We have discussed the potential rejuvenating effects of transfusion in previous letters. Further research is underway to confirm that this fertility treatment is viable. Professor Pantos is supervising four randomized, placebo-controlled clinical trials and two other trials are being conducted by Professor Emre Seli at Yale Medical School.
To learn more about it:

- *See in particular:* [heales.org](https://heales.org), [sens.org](https://sens.org), [longevityalliance.org](https://longevityalliance.org) and [longecity.org](https://longecity.org).

- [Image Source](#).