# 13. From Lab to Commons: Health as a Common Good

by Sophie Bloemen

From the 15th century until the 20th century, powerful people all over the world enclosed and privatized commonly-held land. Up until then, this land was owned and managed by local communities. This process displaced hundreds of millions of farmers who lost their autonomous means of sustenance and were forcibly cast into urban labour markets.

In the late 20th century and early 21st century, a similar movement took place. This time, it enclosed the public good of scientific knowledge and technology. Aided by intellectual property laws, transnational treaties, regulatory capture and international trade agreements, the enclosure movement turned knowledge into privatized products.

## Problems and limitations of the current model

Although the current biomedical system has produced important lifesaving treatments, billions of people around the world cannot afford these medicines, resulting in over 10 million preventable deaths each year. Research and Development (R&D) priorities are not determined by public health needs but by market incentives.

This is the result of an ineffective and costly R&D system that turns new medicines into monopolies, using patent protection. It has allowed companies to set exorbitant prices, draining public health resources and excluding many patient from accessing treatments. The enclosure of knowledge impedes collaboration and leads to an overall lack of transparency. Thriving on secrecy and geared towards profits, this system stifles innovation. It leads to skyrocketing costs, over-diagnosis, over-prescription and the medicalization of health. Together with our overall market-oriented system this has led to privatizing of biomedical knowledge as well as the commodification and commercialisation of health.

A large part of the investment in medical knowledge comes from public funding. The public sector plays a crucial role in funding high-risk research. It is estimated that public funding accounts for 30 to 65 percent of global R&D costs. Many medicines were not only researched but also developed with public money. Finally, we use public funds to pay for those medicines once they are on the market.

## Exclusion coming home

The current pharmaceutical business model has long excluded people in the Global south from the fruits of science. It deemed many treatments unaffordable for most people outside of Europe or the US. Little research and investment has gone into diseases that do not have a profitable market potential. This is why they are called ‘neglected diseases’. In reality, it is the patients, the people who are neglected.

Skyrocketing prices are also starting to threaten access to medicines in European countries, creating massive financial stress on public health systems. An increasing number of treatments for life threatening diseases such as cancer and hepatitis C are unaffordable for both individuals and national health systems, especially in Eastern Europe. Governments are forced to make devilish choices between people: they simply cannot treat everyone.

## Winds of Change

A consensus of dissatisfaction with the present health innovation system has developed over the last years within the public health community. The need for change is obvious; policy makers, researchers, health practitioners and patients are aware something needs to happen. There is a growing willingness to address today’s encroachment on the Right to Health in the biomedical sector, but where would we begin transforming a complex and entrenched system?

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Ensuring people’s access to affordable treatments has not been a policy priority. Instead, policy has been almost exclusively geared towards the growth of European economies and maximization of profits. Many governments are now demanding more transparency and taking actions to bargain harder with pharma in price negotiations.The Netherlands has given this movement a significant push during their EU presidency, questioning the current Intellectual Property system. Yet the push-back from vested interests has been overwhelming*.* Biomedical policy needs a true paradigm shift in order to support a health innovation system that is productive, affordable, accessible and democratic.

## A vision for the future: embracing the commons

How can we move towards as system that embraces health as a common good? How can we take a truly public interest approach to biomedical innovation, driven by health needs? Today there is a loud call for a biomedical innovation system that produces public value and stimulates collaboration, a model that manages knowledge and patents in a beneficial way. A wide variety of voices are questioning whether monopolies on medicines were such a great idea after all.

The commons are an important piece of the puzzle. They teach us to share essential resources, bolstering equity and sustainability. Instead of extracting and enclosing resources for private use, the commons show us how to create an abundance of immaterial knowledge while wisely governing scarce natural resources.

Little by little they are becoming part of the discourse and the lens through which issues around biomedical innovation and access to medicines are considered. People are discussing shared ownership, democratic governance, decentralization, collective responsibility for health and efficient innovation through collaborative innovation and sharing knowledge. The idea of medicines as common goods rather than products is making inroads. As we can see in the essays on DNDi and the Medicines Patent Pool on the next pages, the idea of the commons informs and surfaces in biomedical innovation on different levels and aspects.

## Guiding Principles

When we consider health as a common good and we want to manage it as a commons, it implies we should manage it in a democratic, public and equitable manner. We should strive to make sure everyone has access to the treatments they need. Taking this approach leads us to a number of guiding principles.

Although here we discuss medicines and the need for access to treatment, we should realise that market dynamics have led to a medicalization of health and we are presented with technological fixes for almost all our problems. Yet there is obviously *no pill for every ill* and a holistic approach to health leads us to be **wary of technological solutionism**.

On top of this, in order to take such a structural approach that looks at the system as a whole, we have to move **beyond solely individual rights** in our conception of social justice**.** A rights approach represents an individual claim to certain goods or freedoms. Yet we have to consider how these goods or resources are created in the first place and what we prioritize. So, additionally we should look at the collective interest and the **collective responsibility** for the governance of health and the provision of common goods.

Today we have a **‘tragedy of the anti-commons’**, the biomedical model is not failing society because it is a commons which has become overused. It is the opposite: a model with artificial scarcity of immaterial knowledge goods that are by their very nature abundant and shareable. Intellectual property rights restrict this sharing. This is due to a market structured to favour private, corporate interests. Instead, we should look at ways to **manage biomedical knowledge as a commons** and facilitate equitable access, collaborative innovation and democratic governance of the knowledge.

Managing knowledge as a commons is related to **open innovation** (Open access, open data, open source software). There is however an important distinction to be made between unregulated openness and the commons. ‘Open’ varies in practice. Placing knowledge in a commons does not just mean sharing data and knowledge without regard for their social use, access and preservation. It means introducing a **set of democratic rules and limits to assure equitable and sustainable sharing** for health related resources.

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The modes of production, both of knowledge, scientific process and physical products, should be generative rather than extractive, avoiding the waste, duplication and opacity of our present model. Their governance can be understood as a type of stewardship – in the sense of the responsible and careful management of entrusted resources.

Knowledge commons could facilitate open global research and local production adapted to local contexts (see DNDI example in chapter 15). Attention for the collective and the democratic management of knowledge also translates to an awareness of community and social localised ecosystems. The saying, *nothing about us, without us*, used by HIV/AIDS patient activists who claimed a say in policies and decisions about treatment in the 1990s, is still as relevant as ever. Democratic governances and shared ownership not only serve the development of better, suitable, appropriate treatments for different populations. Creating local capacity to develop and produce medicines eventually serves sustainable access to treatment.

Finally, there is an **important role for institutions to support the commons an**d forge public-civic collaborations.

## Transitional and transformational Initiatives

How can we begin transforming such a complex system? How to move away from the centralised and commercialised practices around health? First we have to let go of the idea that there is no alternative to the current system. Of course there is, there many, we just have to envision, explore and build them.

We need to build on the many initiatives and suggestions that are already helping to transition away from today’s broken system. These initiatives include the use of open knowledge and collaborative innovation, as well as the use of incentive systems where intellectual property does not establish a barrier to access or use while innovators are still rewarded. Some of the key approaches are the following:

* In order to truly move to another system, we have to move away from the expectation of high prices to stimulate investment in R&D as is now the case. The patent provides for temporary market exclusivity, in other words: a monopoly. Moving away from that means de-linking investment in R&D from the expectation of high prices. This means giving monetary rewards other than through monopolies, for example through innovation prizes.
* This allows for the sharing of knowledge, instead of privatising it, generic production and affordable access to the medicines. Some initiatives seek to protect knowledge as a public good through public interest licensing of public research results, and open data policies. Reshaping the incentive system also allows for shifting incentives towards needs driven innovation and added therapeutic benefit.
* Data commons for biomedical R&D are a shared virtual space where scientists can work with the digital objects of biomedical research such as data and analytical tools. One could imagine building a science commons infrastructure of repositories.
* Patent pools are classical knowledge commons where there is institutionalised governance of knowledge and or data. The Medicines patent pool is a UN backed public health organisation working to increase access to HIV, Hepatitis C and tuberculosis treatment in low and middle-income countries. Working with industry, governments and patients and other stakeholders, it licenses needed medicines. It manages knowledge as a commons by pooling the IP, which accelerates innovation and provides affordable access though generic competition.
* Product Development Partnerships are non-profit organisations that develop affordable, innovative medicines for neglected patients and diseases. DNDi is an example of such a non-profit medicines developer.
* Some existing initiatives follow the lead of other sectors experimenting with open source and decentralized production, like bio Hack labs and peer-to-peer cooperatives. Open source is a concept that stems from software development and involves open data sharing, collaboration and results sharing. The worldwide open source community insists on the possibility of participation in a project by anyone in real time and a form of shared ownership that ensures the underlying method and data are public domain.
* The Do-It-Yourself Biology (DIYbio) community applies open source working methods and is emerging as a movement that fosters open access to resources permitting modern molecular biology, and synthetic biology among others. Since 2010, community labs started opening up and became embodiments of the nascent DIYbio community, a grassroots movement of enthusiasts seeking to popularize and democratize biotechnology.

What we see in all these initiatives is the move towards decommodifying medicines and a democratising governance and ownership.

## What about policy?

EU member states and institutions can ensure the stewardship of health by ushering in a more democratic, affordable and sustainable biomedical system. What are polices that transition society away from the current proprietary and centralised model?

A central element of our current system is the intellectual property rights management and this needs to be reformed. Perverse incentives should be take out. It can be done gradually. At the same time investment in alternative models is needed.

Overall institutional ecology will have to be adapted to support bottom up developments and move away from the current centralized model with a few big players to a more decentralized model where knowledge is shared. This will require regulatory reform and investments.

Policies can build on the transitional initiatives and approaches such as open science and bringing knowledge in public ownership. It will be important to enable democratic governance of knowledge; for instance making sure data are shared and ensuring transparency for reliable evidence of health care decisions. It will also require directing trade policy toward creating public goods, and embracing trade policies that open up instead of enclose biomedical knowledge and technology transfer to the Global South.

These are the main directions. We need to approach biomedical innovation less as a profit making opportunity and more like a essential public health issue. Seeing health as commons puts forth a vision of collective benefit pertinent to European citizens in their current circumstances. It also puts forward a practical approach to managing knowledge with multiple benefits. New technologies are facilitating new forms of knowledge production and medicine development outside of the current dominant model. These new developments are starting to take root and they need to be nurtured and supported by financial and regulatory frameworks.

The European Commission and the member states should explore, support and guide initiatives which have the potential of transforming our present biomedical innovation model in favour of the common good. European policy makers, civil society organizations, health-care professionals and citizens will all be crucial to the process of negotiating a transition from the today's deficient market-driven biomedical model to a model designed to serve universal health needs.

Further reading and resources:

From Lab to Commons, Bloemen & Hammerstein: <http://commonsnetwork.org/wp-content/uploads/2018/06/FromLabToCommons.pdf>

People’s Prescription, Mazucato et al:

<https://stopaids.org.uk/wp/wp-content/uploads/2018/10/report.pdf>

<https://delinkage.org>

*This text is based on the policy paper ‘From Lab to Commons’ (2018) by Sophie Bloemen & David Hammerstein, Commons Network.*