The value of population health

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https://wikivisually.com/wiki/T%C3%B6rbel

The Torbel forest in Switzerland has been successfully managed by the local residents for centuries as a Common Pool Resource (CPR). A CPR is "a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use".[1] This is usually conducted through an association, which agrees general rules and policies for the forest's use. The result of this arrangement has been 'both general access to and optimum production from certain types of resources while enjoining on the entire community the conservation measures necessary to protect these resources from destruction (Netting 1976, p.145)'. Although yields are relatively low, the land in Torbel has maintained its productivity for many centuries. Overgrazing has been prevented by tight controls. The CPR not only has been protected but also has been enhanced by investments".[1]

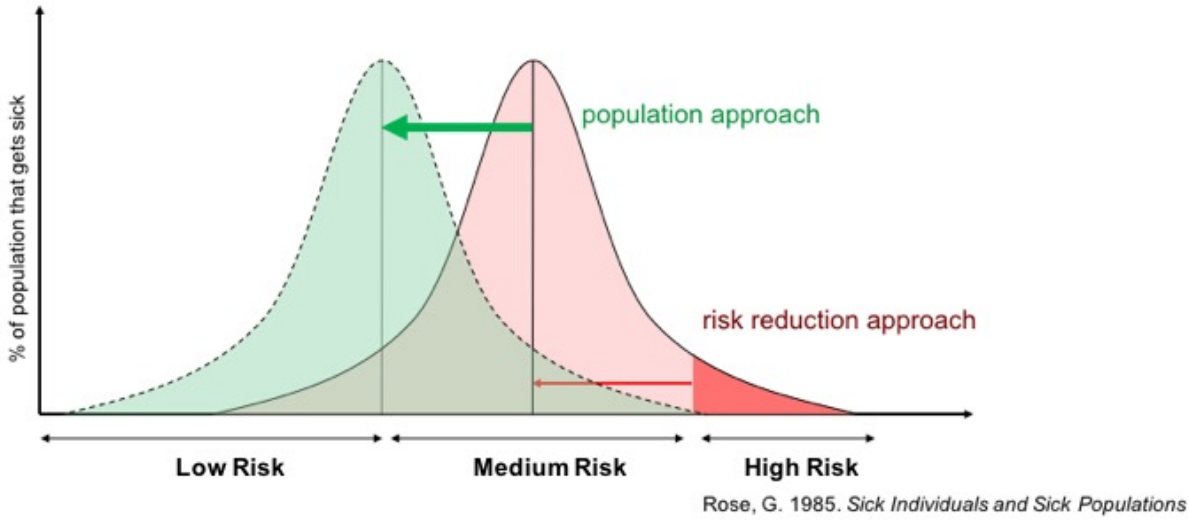
Universal Healthcare Systems: A Common Pool Resource

Universal healthcare systems are man-made resource systems that are mandated to provide care to an entire population within a finite budget, the latter of which is renewed through tax payer contributions. As with any CPR, there is the potential to exclude potential beneficiaries from its use which yields inequalities. There is also the potential to manage it in unsustainable ways that requires an increase in the amount of resource needed to maintain it, as exemplified by the worldwide trend towards increasing healthcare expenditures and increased proportions of GDP being invested in healthcare. It is also possible to exhaust resources in the system by different providers, payers, patients, or others that can lead to a Tragedy of the Commons:

"Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. (Hardin 1968, p. 1,244)"[1]

Avoiding a Tragedy of the Commons: The Value of Population Health

If managed sustainably, universal healthcare systems could, like Torbel, be a resource that with a regularly maintained input and low cost maintenance, could "maintain its productivity for centuries". A key factor in sustainably governing a universal healthcare system CPR (UHS-CPR) is to shift the focus of users, or "appropriators" of the CPR (providers, payers and patients) from short-term symptom-management of high risk individuals, to shifting the entire risk profile of the population through longer term strategies aimed at preventing illness and promoting health of low and medium risk subgroups of the population; an approach to promoting population health that was elegantly described by Geoffrey Rose over 30 years ago[2]:



Rose, G. 1985. *Sick Individuals and Sick Populations*

If appropriators of universal healthcare system CPRs governed their use of the CPR responsibly, like the citizens of Torbel who have created a sustainable and resilient forest that has delivered them economic benefits for centuries, societies would have sustainable and resilient universal healthcare systems that would deliver population health for centuries to come.

Effective governance of UHS-CPRs through Value-based Healthcare

The usual focus of healthcare systems on high risk individuals inevitably leads to annual commissioning cycles which focus on short-term symptom management, which makes it impossible to address the low-medium risk population which accounts for the greatest current and future morbidity, mortality and spend because of the inevitable progression of these individuals to the high risk group if something is not done for them. Incentivizing providers and payers to deliver services that aim to improve population health by preventing illness and promoting health and engaging citizens to take better care of their health is essential if we hope to create sustainable and resilient UHS-CPRs. A key avenue through which we can do this is value-based healthcare, which, following the RCP definition, addresses:

-Population health and wellbeing outcomes
-Individual quality of care including patient experience
-Sustainability (financial, resource and environmental considerations)

Aligned with the RCP's view of value based healthcare, the University of Oxford Value Based Healthcare Programme has created a framework that addresses the two key tasks of focusing on outcomes and optimizing resource utilization along three dimensions – processes, patients and populations:

	Processes	**Patients**	**Populations**
Outcomes			
Resource Optimisation			

UHS-CPR Appropriators delivering Population Health

Adding in examples for these tasks along the three dimensions in the framework above yields a set of actions that could help to guide the focus of universal healthcare system CPR appropriators[3]:

	Processes	**Patients**	**Populations**
Outcomes	Ensuring that patients and populations get evidence-based interventions that adhere to validated guidelines and protocols	Ensuring that the care provided to patients focuses on the outcomes (both clinical and personal) that matter most to patients	Maintaining population health (promoting wellness and preventing disease) and ensuring that all people in need receive care
Resource Optimisation	Ensuring that resources are utilized efficiently and effectively to minimize waste	Ensuring that patients do not get unnecessary interventions	Ensuring that the healthcare resources available (money, time, expertise) are utilized for the maximum benefit of the population being served

Focusing on the **population** dimension, we can extrapolate that **providers** must begin by taking responsibility for the health of the entire population they are accountable to, not just the patients that come to them as an immediate high risk. Further to this, providers need to shift their time frames of impact from short-term symptom management, to medium-long term prevention of disease and promotion of health. Similarly, **payers** need to shift away from year to year commissioning of services that focus on treating sick patients in the population, to longer-term contracts that aim to prevent disease and promote health. These are significant changes for both providers and payers because it requires them to take longer-term views of their actions and it also requires a fundamental shift in how they understand, manage and tolerate risk.

Citizens are the largest appropriators of UHS-CPRs (if we take the UK as an example, there are more than 1 million employees within the NHS, both providers and payers, and 63 million citizens, which will also include the >1 million NHS employees, who have a right to draw on the UHS-CPR their taxes replenish). As the largest appropriator, citizens also have the greatest role in ensuring the sustainability and resilience of a UHS-CPR. The simplest and most important action citizens (who are able to) can take is to keep themselves healthy by engaging in health promoting behaviours such as exercising regularly, eating a healthy diet and avoiding or stopping detrimental behaviours like smoking and excessive alcohol intake.

If all UHS-CPR appropriators took a value-based approach for their actions, we will, without a doubt, build and maintain a sustainable and resilient healthcare system that delivers population health for centuries to come. If we don't, UHS-CPR appropriators will continue "…taking from a resource that belongs to no individual" with the result that "…you end up destroying your neighbor and yourself".[4]

References

1. Ostrom, E. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge University Press (2015)
2. Adapted from: http://basicincome.org/news/2017/10/basic-income-next-big-population-health-intervention/
3. Adapted from: Jani A., Jungmann S. and Gray M. 2018. Shifting to triple value healthcare: Reflections from England. Z Evid Fortbild Qual Gesundhwes 130: 2-7.
4. Romeo LeBlanc, speaking at the 50th anniversary meeting of the United Maritime Fishermen, March 19, 1980; quoted by Matthew and Phyne 1988, p.8.