# Improving Healthcare Access and Outcomes Using Decentralized Technologies and Applied Agorism

May 28, 2017

## Contents

# 1 Rapid Technological Evolution Empowering Individuals

## 1.1 Decentralized Technologies

music, film industries
energy, etc.
p2p, bitorrent, file sharing, circumventing IP laws
blockchain, bitcoin, circumventing middleman institution
darknet markets
crowd funding, gofundme, medical bills, charity
sharing economy, uber, airb&b, OpenBazaar products and services, platform cooperativism, eliminate middleman
decentralized web, ZeroNet, censorship resistance

## 1.2 Applied Agorism

Agorism is a philosophy detailing how to create a libertarian society of voluntary exchanges between people developed by Samuel Edward Konkin III and is expounded upon in his various works [1][2][3].

# 2 Healthcare Monopoly Complicit With Poor Access and Outcomes

## 2.1 Healthcare Market Distorted by Government Intervention

licensing requirements
products sold constraints
hospital accreditation
drug patents

## 2.2 Misdiagnosis

[4]

## 2.3 Disenfranchised Patient Groups

### 2.3.1 Rare Diseases

CVID

### 2.3.2 Unusual Disease Presentations

seronegative HIV

### 2.3.3 Under Studied Diseases

ME/CFS

### 2.3.4 Emerging Diseases

## 2.4 Scarcity of Capable Doctors

The developing world has a major shortage of doctors. For example Nigeria has roughly 14% the number of doctors as OECD countries. [5]

vet anecdote
[6]

### 2.5 Limited Direct Patient Testing, Doctor a Middleman

Doctors are a middleman and serve as a barrier to access testing. Systemic problems exist where seeking alterate opinions does not guarantee improved outcome. Doctors are educated similarly and will have biases prevalent in the population.

[7]

## 3 Patients Fighting Oppression by Practicing Agorism

### 3.1 Sharing Information

#### 3.1.1 Existing Platforms

Forums: Phoenix Rising
PatientsLikeMe
Human Diagnosis Project
CrowdMed

### 3.2 Accessing Information

academic research papers
sci-hub.biz
FindZebra
Enlitic

[8]

### 3.3 Accessing Testing

online lab test services
walkin lab
personallabs
social engineering

Note that the UCSF Viral Diagnostics and Discovery Center is a research laboratory and cannot perform individual patient testing due to federal regulations. We are unable to perform clinical diagnostic testing, and only recommend that patients see their personal physician to discuss available clinical test options.

CLIA requires all entities that perform even one test, including waived test on ... "materials derived from the human body for the purpose of providing information for the diagnosis, prevention or treatment of any disease or impairment of, or the assessment of the health of, human beings" to meet certain Federal requirements. If an entity performs tests for these purposes, it is considered under CLIA to be a laboratory and must register with the CLIA program.

CLIA certification

In US, going to states that allow direct patient testing

### 3.4 Access to Procedures

medical tourism

### 3.5 Access to Treatment

HIV PreP in UK which is not available through the NHS but is cheaply available on the internet from suppliers in India and elsewhere.

[9]

dallas buyers club, historical examples
foreign online pharmacies
forging precriptions
kevin carson anecdote
phoenix rising threads

Marijuana has been shown to compete with prescriptions drugs for conditions including chronic pain, depression, anxiety, nausea, and others [10]. It's use for among cancer and HIV patients to alleviate symtoms is well known. Despite these benefits and the harm reduction when compared to opiates and other prescription drugs, in many states where it is still illegal, patients must break the law to acquire marijuana. Even in states with medical marijuana laws, government regulations can effectivley make it impossible to acquire legally. For example, in New York state, a very limited number of medical conditions are allowed. A prescription from a doctor must be acquired, yet only a few hundred doctors in the state have been licensed to give such prescriptions and there is no public directory of doctors to be able to know where to go to get a prescription. Not only that, but the patient must also purchase a license.

Marijuana is a perfect example of decentralized medicene. It can be grown nearly anywhere with relative ease. Yet, as in New York, we see the government centralizing production by only allowing a limited number of producers who must acquire a license from the state which is extremely cost prohibitive. As is all too common, we see government intervention causing extremely limited access and high costs. If government really wanted to help patients, it could fully legalize marijuana and focus on ensuring home test kits and information is available to consumers to ensure that consumers have access to safe products. This is analagous to the abstience vs. safe sex issue. In this analogy, the government is preaching absitence by not allowing access to marijuana, yet patients who need it are going to use it anyways.

With regard to safety especially in people with compromised immune systems, there are some precautions that can be taken and room for improvement in making cost effective test kits available. For example, marijuana can be heated in an oven to kill some fungus and bacteria that may exist on the plant [11]. Besides visual and olfactory inspection, there are also lab tests that can be performed to examine the plant for fungus, bacteria, mycotoxins, and other contaminants. In [12], dispensary grade cannabis flowers were examined using PCR DNA analysis and other techniques to look for contaminants.

growing own
darknet markets
alphabay

# 4 Future of Agorism Applied to Healthcare

## 4.1 Sharing Economy Breakthroughs Applied to Healthcare

## 4.2 Machine Learning to Phase Out Doctors For Diagnosis

[13]

## 4.3 Homebrew Medical Devices Increasing Prevalence

[14]
[15]
https://openaps.org/outcomes/ OpenAPS [16]
[17] [18] [19] [20]

# References

[1] S. E. Konkin III, W. Conger, and C. Seely, *New Libertarian Manifesto*. Grey Market Pub., 2006.

[2] S. E. Konkin III, "The last, whole introduction to agorism," *The Agorist Quaterly*, vol. 1, no. 1, pp. 3–10, 1995.

[3] S. E. Konkin III, *An Agorist Primer*. KoPubCo, 2008.

[4] H. Singh, A. N. Meyer, and E. J. Thomas, "The frequency of diagnostic errors in outpatient care: estimations from three large observational studies involving us adult populations," *BMJ quality & safety*, pp. bmjqs–2013, 2014.

[5] World Economic Forum, "Health systems leapfrogging in emerging economies project paper," 2014.

[6] T. Ferguson *et al.*, "e-patients: how they can help us heal healthcare," *Patient Advocacy for Health Care Quality: Strategies for Achieving Patient-Centered Care*, 2007.

[7] K. Carson, *The Desktop Regulatory State: The Countervailing Power of Individuals and Networks*. Center for a Stateless Society, 2016.

[8] T. Scholz, "Platform cooperativism-challenging the corporate sharing economy," *Rosa Luxemburg Foundation*, 2016.

[9] C. Wilson, "Massive drop in london hiv rates may be due to internet drugs," *New Scientist*, Jan 2017.

[10] A. C. Bradford and W. D. Bradford, "Medical marijuana laws reduce prescription medication use in medicare part d," *Health Affairs*, vol. 35, no. 7, pp. 1230–1236, 2016.

[11] E. B. Russo and F. Grotenhermen, *The Handbook of Cannabis Therapeutics: From Bench to Bedside*. Routledge, 2014.

[12] K. McKernan, J. Spangler, L. Zhang, V. Tadigotla, Y. Helbert, T. Foss, and D. Smith, "Cannabis microbiome sequencing reveals several mycotoxic fungi native to dispensary grade cannabis flowers," *F1000Research*, vol. 4, 2015.

[13] E. Topol, *The patient will see you now: the future of medicine is in your hands*. Basic Books, 2015.

[14] K. A. Carson, *The homebrew industrial revolution: a low-overhead manifesto*. Booksurge, 2010.

[15] C. Lausted, T. Dahl, C. Warren, K. King, K. Smith, M. Johnson, R. Saleem, J. Aitchison, L. Hood, and S. R. Lasky, "Posam: a fast, flexible, open-source, inkjet oligonucleotide synthesizer and microarrayer," *Genome biology*, vol. 5, no. 8, p. 1, 2004.

[16] D. Lewis, "Introducing the# openaps project," 2015.

[17] K. Carson, "Open-source healthcare," 2009.

[18] K. Carson, "Open source revolution circumvents capitalist monopoly," *Center for a Stateless Society*, 2016.

[19] K. Carson, "Health care and radical monopoly," in *Markets Not Capitalism: Individualist Anarchism Against Bosses, Inequality, Corporate Power, and Structural Poverty* (G. Chartier and C. W. Johnson, eds.), ch. 7, pp. 369–375, New York: Minor Compositions, 2011.

[20] K. Carson, "The healthcare crisis-a crisis of artificial scarcity," *Center for a Stateless Society*, 2010.