



# The Pollination Approach to Delivering Psychedelic-Assisted Mental Healthcare

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IN THIS ARTICLE I OUTLINE a novel economic approach for delivering psychedelic-assisted mental healthcare, the Pollination Approach. The Pollination Approach focuses on the intrinsically interdependent production of individual and community wellness. It contrasts sharply with the current pharmaceutical-centered approach to mental healthcare, which focuses on the management of symptoms rather than the production of wellness, and reflects divisive economic conceptions that have contributed to rising rates of mental distress.

In the next section I describe the economic conceptions animating the pharmaceutical approach. In the following section I discuss the relationship among these conceptions, the disruption of community social and economic systems, and mental health. In the third section I present the Pollination Approach, describing how all of its facets—the design of treatment sites, the conduct of integration activities, the configuration of ownership and decision-making structures, and the financial structures used to create and allocate shared prosperity—promote the production of wellness through the renewal and recirculation of community resources.

## The Pharmaceutical Approach

The pharmaceutical approach to mental healthcare portrays mental disorders as clusters of biologically-based symptoms susceptible to being treated primarily with drugs, much like a physical disease. This approach has benefited drug manufacturers, whose U.S. revenues from the sale of psychiatric drugs rose from \$2.8 billion in 1987 (the year in which Prozac was introduced) to \$34 billion in 2010.<sup>3,4</sup> Yet despite the fact that antidepressants alone represent the most prescribed category of pharmaceuticals among the U.S. non-geriatric adult population,<sup>5</sup> American mental health has reached a crisis state. The national suicide rate has increased to its greatest level in 50 years and continues to rise.<sup>6</sup> The U.S. also has the highest rate of death from mental health and substance abuse disorders among peer countries.<sup>7</sup>

The dire state of our collective mental health is linked to widely-held economic conceptions that have contributed to the pharmaceutical approach's financial profitability. The first such conception is that of economic individualism. When psychiatric drugs were first introduced in the 1950s, patients were viewed as socially embedded individuals whose mental illness reflected both psychosocial and biological factors, and for whom pharmaceutical treatment was considered an adjunct to psychological and social remedies. Pharmaceutical manufacturers

actively promoted the reconceptualization of mental illness as a constellation of biologically-based symptoms, and of patients as atomized consumers devoid of psychological and social context. These shifts, which leveraged an ascendant cultural view of people as individualistic market participants, promoted the long-term consumption of medication as the primary modality for treating mental distress.<sup>8,9</sup>

The second widely-held economic conception that has contributed to the pharmaceutical approach's financial profitability is the belief that unconstrained market processes produce the best economic outcomes. American drug manufacturers have leveraged and promoted this belief, sponsoring numerous economic studies intended to convince policymakers that a hands-off approach to the economic regulation of the industry would maximize innovation, with high drug prices representing the cost of progress.<sup>10</sup> Prescription drug spending in the U.S. has increased dramatically as a result, rising more than 1,800% between 1980 and 2015 and outpacing that in other developed countries.<sup>11</sup>

## The Disruption of Community Systems and the Impairment of Mental Health

The economic conceptions animating the pharmaceutical approach have impaired our collective mental health through their influence on an expanding array of policies and practices over the past four decades. Market competition is now widely regarded as the best and most natural organizing principle for all human relations,<sup>12</sup> and economic individualism has come to represent not just independence and self-reliance, but the prioritization of self over relationships, and of individual success over the common good.<sup>13</sup>

The reason that these divisive conceptions have been so damaging is that they conflict with basic human nature. We possess an evolutionary drive to connect and cooperate with each other because doing so helped our ancestors survive.<sup>14</sup> The primary structures in which we have traditionally expressed and fulfilled this drive are residential communities, complex systems of people and resources linked in interdependent social, economic, ecological, and other interrelated systems. As in nature, healthy systems promote individual and collective well-being. However, the ascent of the economic conceptions discussed above has disrupted the functioning of community systems.

First consider community social systems. Americans no longer come together as they once did: They now have fewer interactions with friends and family, and are less likely to belong

to organizations that provide opportunities for social interaction.<sup>15, 16</sup> This crisis of connection<sup>17</sup> is reflected in a loneliness epidemic<sup>18</sup> that has fueled rising rates of depression, anxiety, and addiction.<sup>19</sup>

Paralleling the crisis of connection in social systems is a crisis of extraction in economic systems. In localities throughout the U.S., outposts of large corporations have displaced locally owned businesses. As a result, locally produced income is extracted by distant shareholders rather than being recirculated within the community to fund local (re)investment, contributing to economic inequality. Further, the extraction of decision-making authority by remote corporate managers with no direct connection to local ecosystems results in the unsustainable use of local resources, depleting the human, natural, and other forms of productive capital available to provision ongoing local economic activity.

The crises of disconnection and extraction in community social and economic systems have fueled rising rates of disorders such as depression and addiction. Disconnection is a core feature of depression<sup>20</sup> and addiction represents an adaptive response to disconnection.<sup>21</sup> Economic stress increases vulnerability to both conditions.<sup>22, 23</sup> Large-scale statistical analysis supports these ideas, demonstrating that countries with greater income inequality – reflecting the promulgation of policies and practices embodying the individual-centric, hyper-competitive economic conceptions discussed above—exhibit higher rates of depression and illegal drug use (a proxy for addiction).<sup>24</sup> A comprehensive approach to the delivery of mental healthcare must counteract these divisive conceptions' damaging psychological influence by facilitating the repair of community systems, complementing and contributing to individual healing.

### **The Pollination Approach**

The Pollination Approach to delivering mental healthcare recognizes the mutually reinforcing relationship between individual and collective wellness. It is rooted in the ecological principle that the production of wellness depends on the continual renewal and recirculation of system resources (versus their extraction or depletion).<sup>25</sup> Pollinator organizations facilitate the renewal and recirculation of resources in community systems as pollinator organisms do in natural systems.<sup>26</sup>

### **Community Reconnection**

The delivery of psychedelic-assisted mental healthcare under the Pollination Approach facilitates, first and foremost, the renewal and recirculation of human resources. Psychedelic medicines possess a documented ability to foster connection, and the shift from disconnection to connection represents a key mechanism in the healing process.<sup>27</sup> The Pollination Approach harnesses this shift by (re)connecting patients to social, economic, and other community systems, contributing to individual healing and the revitalization of the systems themselves.

Treatment sites enacting the Pollination Approach function as wellness centers, gathering places where community

members may participate in a range of healing and community-building activities in addition to psychedelic-assisted therapy. Explicit reconnection activities for those who have undergone therapy include group integration sessions as well as community reintegration programs conducted in partnership with local organizations, such as businesses, cultural institutions, civic organizations, religious organizations, and others. These organizations may also serve as points of access, especially in communities where psychedelic medicines are viewed with skepticism.

### **Local Wisdom**

The identification of specific partner organizations and adaptation of other delivery-of-care elements to community needs and customs are undertaken in close consultation with local wisdom keepers. Community elders, social workers, ER workers, spiritual leaders, union representatives, local business owners, and others may all possess distinctive knowledge of common trauma patterns, recirculatory gaps in community systems, and sources of resource depletion and extraction. The integration of such wisdom with more generalized knowledge of therapeutic techniques and psychedelic medicines optimizes the delivery of care in a given community.

### **Governance Principles**

The ownership and governance of wellness centers under the Pollination Approach also support the production of wellness through the renewal and recirculation of community resources. Two core principles inform choices in this area. The first is stakeholder inclusivity, the notion that an organization should operate for the explicit benefit of its stakeholder groups including customers, employees, community members, and others. The principle of stakeholder inclusivity naturally supports the inherently inclusive process of wellness production.

The principle of stakeholder inclusivity contrasts sharply with the creed of shareholder primacy guiding most corporate decision-making. The latter ascended in conjunction with the divisive economic conceptions discussed above. It holds that the sole purpose of a corporation is to serve the interests of shareholders by maximizing financial profits, as reflected in the pharmaceutical approach's emphasis on managing symptoms. The production of wellness is less lucrative for pharmaceutical shareholders because it reduces the need for ongoing medical intervention.

The second principle informing the ownership and governance of wellness centers under the Pollination Approach is distributed local ownership. Local ownership supports the health of community economic systems by promoting the recirculation of income, creating an economic multiplier effect from the local (re)investment that such recirculation enables. Local ownership also promotes the sustainable use of a community's human, natural, and other productive resources because owners and managers participate directly in the local ecosystem, attuning them to local conditions. Distributed local ownership—ownership that is spread widely among local community members

from different stakeholder groups—amplifies these benefits by dispersing financial returns and diversifying the information sources contributing to decision-making. Collaborative ties between wellness centers and non-local organizations in the psychedelic-assisted mental healthcare ecosystem, such as MAPS and MAPS PBC, complement local ownership by promoting the circulation of global resources, such as knowledge gained through experiential learning.

## Cooperative Organization

The organizational form that most naturally supports the principles of stakeholder inclusivity and distributed local ownership is a cooperative structure, which distributes ownership and control among the members of stakeholder groups such as workers or customers.<sup>28</sup> Treatment sites enacting the Pollination Approach may distribute ownership and control most widely by adopting a multi-stakeholder cooperative structure, in which the cooperative's owners include members of both of these groups as well as other community stakeholders.

Cooperatives are typically organized as corporations or LLCs, legal forms that distribute the financial returns from community wellness centers among stakeholder-owners. Though non-profit organizations are more commonly associated with the production of social returns, existing legal classifications do not readily accommodate entities producing both types of return because they reflect an ingrained assumption that the two are incompatible.

An organization's legal form also does not by itself guarantee a given behavior pattern. For example, some non-profit hospitals have been criticized for accumulating large cash reserves that are not being used to benefit the community,<sup>29</sup> while the Business Roundtable—an association of corporate CEOs that has traditionally endorsed shareholder primacy—recently proclaimed that a corporation's purpose is to promote “an economy that serves all Americans.”<sup>30</sup> The extent to which a wellness center's specific incentive and decision-making structures support the mission objectives and governance principles discussed above is thus more consequential than its legal form.

## Financial Structures for Sharing Prosperity

As discussed above, multi-stakeholder cooperative organization enables community stakeholders to share in the financial returns generated by local wellness centers enacting the Pollination Approach. Symmetrically, wellness centers may finance their ongoing operations by sharing in the economic prosperity they enable for patients and communities. Mechanisms such as deferred payment plans linked to patients' post-treatment income, employer-sponsored insurance coverage of consciousness-focused healthcare, and government grant funding based on reduced public welfare spending facilitate the collection of revenues from the provision of psychedelic-assisted therapy. Similarly, the performance of contract research for entities such as MAPS, and the provision of therapy sessions and apprenticeships to trainees in external credentialing programs, create revenues and control

costs by tapping into shared value co-created with other participants in the psychedelic-assisted mental healthcare ecosystem.

Financial funders play a critical role in this ecosystem. The equitable sharing of jointly enabled prosperity between funders and other stakeholders requires innovation because traditional funding structures reflect the dichotomy between the production of social and economic returns embodied in the legal distinction between non-profit and for-profit enterprise. On the one hand, philanthropic funders may be unwilling to contribute to wellness centers organized as for-profit entities due to the ingrained belief that non-profits specialize in the production of social returns, an assumption that is reinforced by the favorable tax treatment of non-profit donations under the U.S. federal tax code. On the other hand, conventional venture-style mechanisms for the external funding of for-profit startups focus on the production of concentrated financial returns for the benefit of shareholders who retain a long-term equity stake,<sup>31</sup> which conflicts with the governance principles discussed above. Wellness centers funded with such mechanisms would be deterred from generating wider social and economic returns through the renewal and recirculation of community resources, and also from engaging in the prototyping necessary for continual learning.

Financing mechanisms that transcend these institutionalized trade-offs are currently under development. One example is a structure that builds on recent innovations in venture capital financing intended to align the long-term incentives of founders and funders. It works by paying initial funders a capped return drawn from wellness centers' operating cash flows; transferring funders' original equity claim to a stakeholder pool; and distributing or selling shares in this pool to workers, patients, and members of other local stakeholder groups.<sup>32</sup> Ultimately, these local owners would go on to pollinate additional local economic activity by investing their financial dividends (and perhaps their knowledge, labor, and social capital) into other community enterprises.

## Conclusion

Psychedelic-assisted mental healthcare holds revolutionary potential for treating various forms of mental distress. In order to fully realize this potential, it should be delivered using an equally revolutionary economic approach. The Pollination Approach outlined above seeks to meet this aspiration by serving as more than a conventional business model, and as a source of healing itself.

## NOTES

1. Smith School of Business, University of Maryland and Transformative Capital Institute. Please use bznelner@rhsmith.umd.edu for any correspondence.
2. I am grateful to many people who have contributed to the ideas in this article. Special thanks go to David Armistead, Daniel Lawhon, and Katharine Milano for offering invaluable insights and suggestions; and to Stephen Torrence for providing excellent research assistance.
3. Frank et al., 2005
4. Smith, 2012
5. Martin et al., 2019

6. Koons, 2019
7. Kamal, 2017
8. This paragraph draws on Braslow (2013).
9. Psychiatric medication is no doubt effective in some cases, but the widespread use of antidepressants – the most prescribed category of drug for the US non-geriatric adult population – does not align with data on their efficacy. The most comprehensive meta-analysis of prior research to date indicated modest effects for relatively few groups (Carroll, 2018; Cipriani et al., 2018).
10. Zaitchik, 2018
11. Sarnak et al., 2017
12. Monbiot, 2016
13. Way et al., 2018
14. Hawkey & Cacioppo, 2010
15. Putnam, 2000
16. McPherson et al., 2006
17. Way et al., 2018
18. Cigna, 2018
19. Hawkey & Cacioppo, 2010
20. Karp, 2017
21. Alexander, 2010
22. Shaw et al., 2011
23. Sturgeon et al., 2016
24. Wilkinson & Pickett, 2009
25. Regenes Group, 2016
26. Michael Shuman (2015) introduced the term “pollinator” in the field of community economics.
27. Watts et al., 2017
28. Schneider, 2018
29. Jaquis, 2016
30. Business Roundtable, 2019
31. Brandel et al. 2017
32. Thanks to Daniel Lawhon for this suggestion.

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