

ESG Benefits of an Expanded Medicinal Cannabis Market



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Background

Cannabis has been cultivated, utilised, and consumed by humans for millennia (first recorded use over 6,000 years ago in Asia).

Today, close to 1.8 million adults in the UK — around 2.8 percent of the country's adult population — are using illicit cannabis to treat symptoms of chronic illness, according to YouGov / Sapphire Clinic polling¹. This compares to around 20,000 - 30,000 annual prescription cannabis patients in the UK, according to multiple clinic sources.

Half a century of prohibition has hindered cannabis research. However, thanks to forward thinking doctors, cannabis advocates, natural healers and community growers globally, there have still been steps forward in our understanding of cannabis' mechanism of action within the human body.

Cannabis is a plant-based medicine, just as many other important medicines are in our lives. However, cannabis is only just again coming to the forefront of being available to treat chronic conditions, where other drugs have failed or imposed side effects with a negative impact on a patient's quality of life, the NHS, and wider society.

The Science

In essence, cannabis supplements the body's natural cannabis system, called the endocannabinoid system. Humans, as well as many other animals, have this system throughout the body.

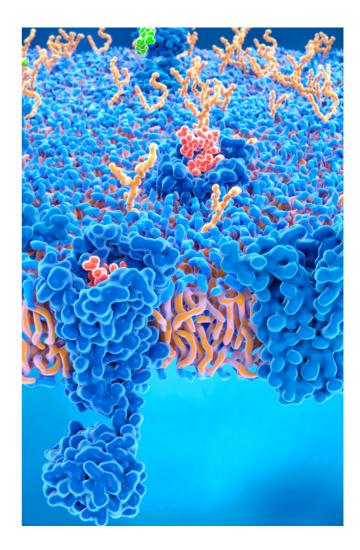
The endocannabinoid system (ECS) is a biological network distributed throughout the entire human body and central nervous system, including the brain. The body produces its own endocannabinoids as a means of maintaining homeostasis in the body. Cannabinoids from the cannabis plant known as phytocannabinoids, interact with the ECS, mimicking our own endocannabinoids, helping the body restore a sense of wellbeing and homeostasis.

In the brain, the system has an effect on memory, control of movement, modulation of pain, development of nerve growth and plasticity, and the adaptability of the nervous system. It has an influence on sleep, appetite, anxiety and social behaviour, to name but a few important functions.

Outside the brain, the endocannabinoid system is also widespread and has effects on the bladder, the bowels, the reproductive system, the heart, the hormonal and metabolic systems, and even has a role in the control of cancer. In other words, it is one of the most important bodily systems — yet one of the least understood.

According to Drug Science²:

"Preliminary evidence suggests that medicinal cannabis may be effective in reducing both pain severity and pain interference while also improving quality of life, general health, mood and sleep in patients with chronic pain. Increasing uptake of medicinal cannabis coupled with growing evidence of both the effectiveness and safety of these medications indicate a need both to make medicinal cannabis more widely available and to reduce financial costs associated with its use."



Current prescribing

The legal situation in the UK (the status quo) is as follows:

- In November 2018, medicinal cannabis was legalised in the UK.
- Cannabis Based Products for Medicinal use in Humans (CBPMs) can be prescribed, if no other licensed medicine could be of help to the patient.
- GPs are not able to initiate prescriptions of cannabis medicines to their patients.
- Only doctors on the specialist register are permitted to initiate prescriptions.
- There are now around 40 private clinics prescribing in the UK for chronic conditions.

The NHS will only advocate the use of medicinal cannabis in three circumstances, stating³:

"There is the most evidence of clinical effectiveness in the following areas where licensed products are now available:

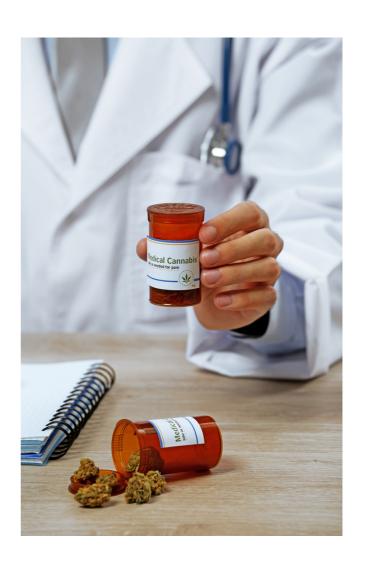
- intractable nausea and vomiting
- MS related spasticity
- severe treatment-resistant epilepsy"

In the UK, a wide range of conditions are treated with THC and CBD, two of the active ingredients in the cannabis plant.

These cannabinoids are often presented in different ratios, and typically consumed either by vaping whole/ground dry flower,

or ingesting prepared oil concentrates. Sublingual wafers, sublingual sprays, gel caps, suppositories, transdermal patches and pessaries are also widely used in other jurisdictions.

Legal medicinal cannabis usage is here to stay in the UK. Currently prescribed solely through private clinics, medicinal cannabis advocates hope to see a wider level of access through public healthcare in the future.











The ESG perspective

The ESG benefits of expanded medicinal cannabis prescribing

Environmental, Social, Governance (ESG) is about creating a set of standards that measure a business' impact on society, the environment, and how transparent and accountable it is.

When comparing the newly legalised and regulated medicinal cannabis market with the unregulated illicit cannabis market, it is clear there are significant ESG benefits of wider prescribing in a regulated market.

Providing our members with tools to work towards better ESG outcomes

ESG Working Group Mission Statement



Environmental

The establishment of a medicinal cannabis market in the UK can have various environmental impacts across the entire supply chain, including cultivation, processing, transportation, and disposal. Adopting sustainable and eco-friendly cultivation practices can lead to reduced environmental impact.

Energy Usage

Medicinal cannabis is most often grown indoors under artificial lights and in controlled environments for the majority of the global supply, using a lot of power.

The question is where does the power come from to power the facility. It is important that when there is either a dynamic shift in an industry, or a new industry is emerging, to take advantage of complimenting that industry with other emerging technology, such as renewable energy.

We believe that the majority of the unregulated UK cannabis supply chain uses power off the National Grid (which is still heavily reliant on fossil fuels⁴), or in a worst case scenario not pay for the power at all. For larger, unregulated cannabis farms, less detectable power can be delivered by diesel generators to produce crops.

According to the Government⁵, in 2021, 41% of UK electricity came from renewable sources.

However, there are also challenges with the current regulated market. In the UK all legal medicinal cannabis supply is grown in controlled conditions and imported from other countries, some far across the globe. This increases the carbon footprint between producer and patient, generating higher carbon emissions than could be drastically reduced in a regulated, domestic licensed facility / supply chain, utilising well engineered sustainable methods. Furthermore, Good Agricultural Practices imposed in the legal setting prohibit the use of pesticides on crops that may infiltrate water courses and damage wildlife.

Waste

Waste is unregulated in the illicit market, and with the fear of detection, there is an increased tendency for illicit cultivators to dump it where they can. Waste disposal issues may range from horticultural waste water mixed with fertiliser disposed of down sinks and the clogging of drains, to the risk of fly-tipping and the dumping of waste material in public open spaces like woodlands, lakes or rivers⁶.

In a sustainable regulated market, waste must be disposed of in the correct manor due to strict licensing conditions.

In the global cannabis market, be it medicinal or wider adult use, plastic dominates product packaging as the most cost-effective solution but not the best when storing plant material. This, in addition to the use of single use vape cartridges, will contribute to the global issue of plastic contamination and other environmental issues.

Licensed companies should be required to use more sustainable solutions that are available on the market, such as bio-plastics and returns policy of used cartridges.





Social

Due to drug prohibition laws, cannabis has been sold over the years in the illegal market, alongside other criminal activity. As with most organised crime, there is likely to be limited social consideration, with the most extreme negative impacts coming from gang culture, human trafficking, or the social impacts of an industry not considering its wider stakeholder base.

Justice and public safety

In the current system, minority groups are more likely to face police interventions, such as stop-and-search, and more likely to receive custodial sentences for drug law infringements. According to Release UK "black people were stopped and searched for drugs at 6.3 times the rate of white people, while Asian people were stopped and searched for drugs at 2.5 times the rate, and those identifying as mixed race were stopped and searched for drugs at twice the

rate of white people". Minors from ethnic backgrounds are also reportedly at significant risk. There is also the issue of individuals incarcerated for medicinal usage.

According to West Midlands Police,¹⁰ unregulated cannabis farms are very dangerous places and pose a serious risk of fire. Often the electricity meter has been bypassed and seriously overloaded electrical

circuits run close to water-filled pipes. In 2012, it was reported that over £200m worth of electricity was stolen.¹¹ Plants grown upstairs in a building can also cause floorboards to rot, presenting the danger of collapse.

It is also important to consider that sometimes the people working in these 'farms' are victims of human trafficking and working against their will. Amongst those, Thais, Vietnamese and Albanians are most vulnerable, with a large proportion of those individuals being minors. Illegal activity at scale can result in social unrest, as is evidenced by the county-lines crisis as "criminals are using burgers and warm coats to recruit hungry, cold children into county lines gangs in towns and cities across the UK, experts are warning". In these county-lines across the UK, experts are warning".

Health

In an unregulated market, the end user does not have an MHRA approved product complying with the high standards imposed on all UK medicines. Quality controls are the backbone of the pharmaceutical industry and are designed to protect society. Furthermore, there is limited structured patient care or safeguarding, in an illegal setting. This can leave vulnerable people open to potential deviation from a suitable medicine, and appropriate dosages, to treat a chronic condition.

The regulated 'specials' medicinal market has tested and certified products that are:

 Free from micro-toxins (tested to the British Pharmacopeia).

- Free from heavy metals and pesticides
- Accurate labels showing the percentage of THC and CBD, as well as other cannabinoids.
- Warning labels about the dangers of the product (such as drowsiness).
- Providence labels showing where product has been manufactured.
- Advice from health care professionals on appropriate dosages and titration.

On a positive note, North America¹⁹ has seen a notable increase in medicinal cannabis use amongst females and "cannamoms" for common health issues such as PMS, menopause, and endometriosis. However, there is still a lack of research around cannabis use throughout pregnancy²⁰ and breastfeeding.

This brings us onto the issue of child safety, as reported in North America around consumption of edibles amongst minors and the need for child-safety packaging. The cannabis industry and consumers have a responsibility to ensure that minors are protected from accidental consumption, and products are not marketed in a way that make them attractive to children.

Finally, a wider adoption of medicinal cannabis could help the NHS mitigate the side effects of other prescription drugs,²¹ reduce the strain on the ambulance service and hospital beds, get people back into employment, and produce fairer societal outcomes to help rectify those that have been affected by prohibition.

Communities and equality

The growth of a medicinal cannabis industry can bring numerous economic benefits to the UK, such as the creation of jobs in local communities, and capital investment. This is especially important in more rural settings where agriculture is suffering from factors such as global warming and reduced agricultural subsidies.

However, there are various socio-economic inequalities in the industry that need to be reviewed such as the diversity landscape, ensuring that there are fair and ethical opportunities for recruitment, employee progression and entrepreneurship.¹⁴

Minority groups, specifically females, ¹⁵ BAME ¹⁶ and LGBTQIA+ community and individuals with a disability, are most likely to be vulnerable to systematic identity based racism or discrimination issues and have an unfair disadvantage.

Notably, these groups are also often underrepresented in clinical research and mainstream media. Recently, a UK study at Kings College London titled "Cannabis & Me", has struggled to attract black and Asian UK users, due to the study being met with suspicion on how data will be used and distrust of the establishment.





Governance

Governance is limited or non-existent in an unregulated setting. Examples range from a breach of UK laws that govern civil society; to failure to pay taxes, whether through business taxation, VAT, or PAYE contributions.

For instance, unregulated grows are not subject to UK HSE and equalities legislation, and may have little or no standard operating procedures which are required within a registered company or licensed production facility.

All registered companies have statutory requirements to adhere to, ensuring a safe place to work, as well as providing data protection and diversity targets.

Good governance ensures equitable treatment of all stakeholders in an organisation.



Conclusion: Better stakeholder outcomes

The vast majority of cannabis consumers, including those who do so for medicinal reasons, source products from the unregulated market.

Increased UK Government support to help health care professionals (HCPs), such as GPs, understand the emerging legal market, will further empower our medical industry to provide medicinal cannabis as an option for treatment.

This can lead to better health outcomes, without the severe side effects caused by some other more invasive or addictive licensed medicines that can put a strain on the NHS and society.

Medicinal cannabis may not work for all patients.

However, the education of all HCPs to understand the therapeutic benefits and drug interactions of medicinal cannabis will in turn support the migration of unregulated cannabis users to a regulated industry with strong ESG credentials:

- carbon negative,
- socially supportive,
- environmentally sustainable,
- and with good governance.

We believe that there is strong evidence to suggest that a better regulated medicinal cannabis market will have positive impact on:

The environment Wider society

The economy and stakeholders of the industry

It is clear there is a strong ESG, in particular social, case for supporting the expansion of the medicinal cannabis market. Most importantly, getting this right will help patients with particular chronic conditions.

The Cannabis Industry Council's ongoing 'Protect our Patients' 22 campaign aims to deliver these much-needed improved patient outcomes.

Protect Our Patients

The Protect our Patients campaign is calling on the UK government to allow GPs to initiate prescriptions of cannabis medicines, based on the best practice undertaken by similar jurisdictions elsewhere, such as Australia, Denmark, and Germany.

This can be achieved by amending the 'Misuse of **Drugs (Amendments) (Cannabis and Licence Fees)** (England, Wales and Scotland) Regulations 2018', section 4, to say 'specialist or general medical practitioner'.



Support the Protect Our Patients campaign

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About the CIC

The Cannabis Industry Council (CIC) is a leading membership organisation representing the entire UK cannabis industry. Membership is open to organisations and business which either work within or operate from the United Kingdom, the Channel Islands, and the Isle of Man.

Together, our mission is to lead the industry to success and enable it to speak with one voice – for, and by, the sector.

A collective voice for the medical cannabis, CBD, and hemp sector across the UK.



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