

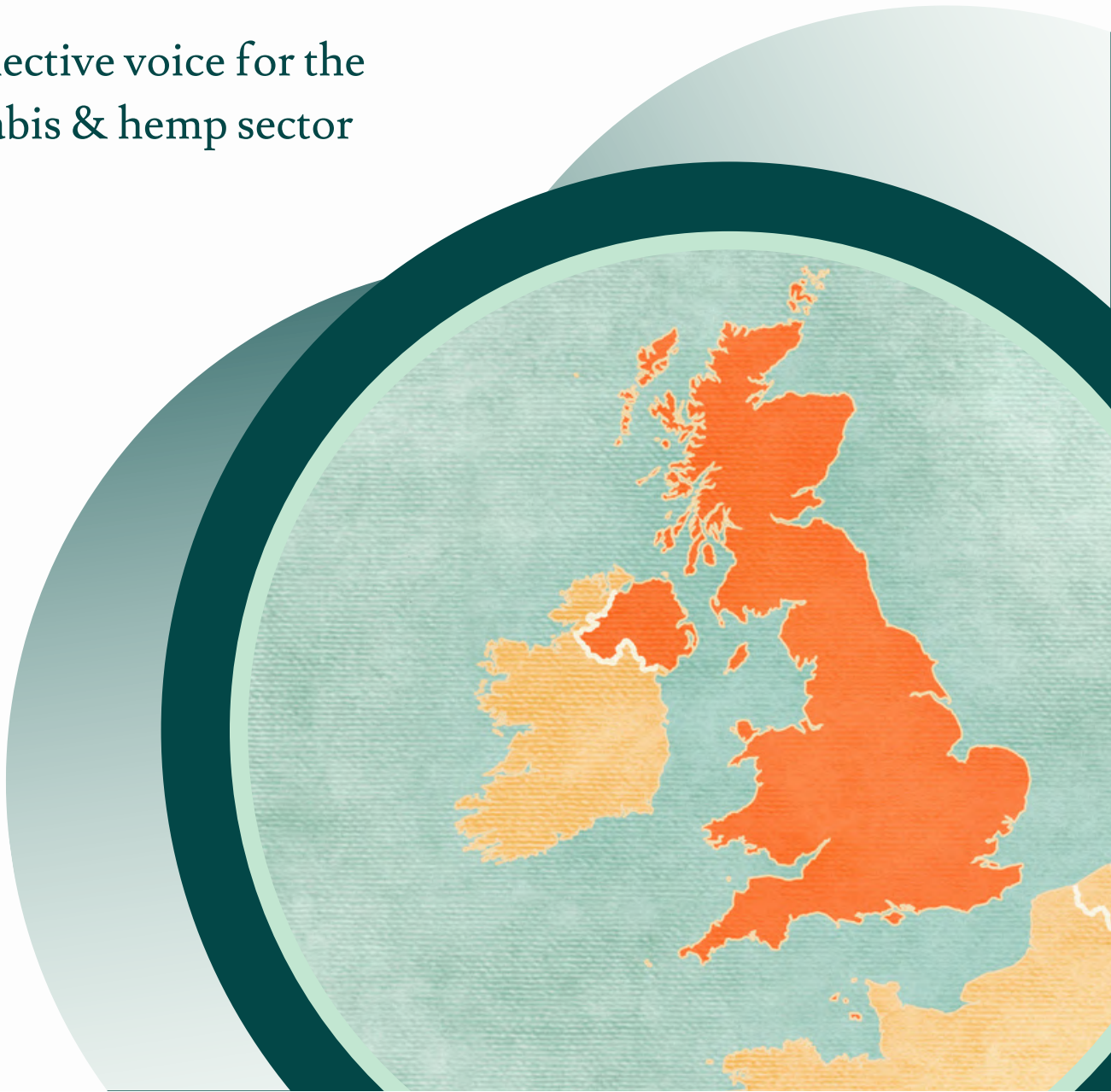
2021/22



ANNUAL REPORT

Cannabis Industry Council

A collective voice for the
cannabis & hemp sector



A collective voice for the cannabis & hemp sector

The Cannabis Industry Council brings together organisations, businesses, and groups working in many different ways to promote the cause of Cannabis and Hemp.

Together, we influence the future of Cannabis and Hemp in the UK and learn from and network with fellow sector organisations. It is a collective voice for, and by, the sector.

We define, set, and maintain the gold standard for sector organisations so that the highest possible standards may be achieved. Through our working groups, each Chaired by a member of the Executive Committee, members drive forward objectives in a range of areas of interest.



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Chair's Report

In May 2022, we celebrated the Council's first anniversary, in itself a cause for congratulations as we can now say that our 107 members truly represent the majority of companies, charities and organisations that work in this exciting new field.

The CIC has nine Working Groups addressing issues across the entire sector:

- Standards (Elisabetta Faenza)
- Hemp (Jamie Bartley)
- Plant Science (Gary Yates)
- Prescription Cannabis (Sunil Aurora, James Smith & Kirsty Morrison)
- Research (Anne Schlag)
- Environmental & Social Responsibility (Toby Shillito)
- Lobbying (Will de Peyer)
- Scoping Group for Adult Use (Callie Seaman)
- Ireland (Peter Reynolds)

In addition, Sam Cannon is our International Liaison Officer, Crispin Blunt MP represents Parliamentary issues, Andrew Barnes is our Charity Engagement Lead, Matt Hughes represents Patients Groups and Kate Thorpe oversees Marketing & PR.

In our first year, we commenced the vital lobbying project kindly run by Tendo Consulting and through Maple Tree. With a strong database of MPs and peers with cannabis companies in their constituencies, the team have already met with senior officials in BEIS and DEFRA.

Members have agreed part funding for our Health Economy project from the University of York. Fundraising continues for the final £8k required to take this work forward.

The Council has also been working with the APPG for CBD dealing with the issues arising from Novel Foods and the FSA list – which may decimate the CBD industry if we are not careful.

Working Groups have been deliberating and over the coming few months we will see reports and opinion pieces published. This is vital as we build our profile as the voice of the cannabis industry. Our vision is to see the senior CIC team to be the 'go to' opinion on all matters cannabis for the press and national media.

In June 2022, we appointed a Chief Executive to the Council. Mike Morgan Giles will join in August 2022 and provide crucial strategy and oversight as we work towards achieving our vision.

Thank you to everyone who has joined us in our endeavours. Many thanks to Kate Thorpe and Gillian Aitken for guiding us so ably through this start-up phase. Thanks also to Vice Chair Elisabetta Faenza, to Charles Clowes as treasurer and of course our Working Group chairs and executive representatives.

Our first year of activity is a good start, but there is a lot more to do, particularly raising awareness of the benefits of cannabis and hemp. I look forward to the second year and more progress.

Mike Barnes
Chair
August 2022



Chair: Prof. Mike Barnes

Membership

107 members

Membership of the Cannabis Industry Council is open to organisations and business which either work within or operate from the United Kingdom, the Channel Islands, the Isle of Man and the Republic of Ireland.

Members have access to Working Groups and regular networking events and the opportunity to build valuable relationships with fellow members. We host four all-member meetings every year.

Members receive a listing on our online directory, linking patients, stakeholders and the public to your organisation. Members also benefit from regular engagement via the CIC's marketing activity.

Cross-sector representation

Members are drawn from the following areas:

- Agriculture
- Banking & Investment
- Campaign Group
- Cannabis Clinic
- Commercial & Professional Services
- Dispensary
- Education
- Hemp CBD
- Infrastructure
- Insurance
- Law
- Licensed Producer
- Media & PR
- Patient Group
- Pharmaceutical & Biotechnology



Bridging the gap between patients and industry

Patient experiences are integral to the development of the UK cannabis sector. Since the change in law in 2018, patients and patient groups have sensed a disconnect with industry. The Cannabis Industry Council is determined to be part of a change: dedicated to bringing patients and industry together. So far, patient groups Medcan Support, PLEA, and Cancard are valued members and a strong voice within a range of Working Groups.

The proposed CIC (detailed in the Standards section) will support this by giving patients confidence that the product and service they receive is ethical and held to the highest standards – standards which have been developed and agreed across members and the executive committee.

With the industry in its infancy and continually developing, patients have experienced issues with consistent product availability, quality, transparency, patient access or experience. Tackling these issues and improving patient engagement will continue to be a subject of discussion.

Access

2022 has seen patient numbers steadily increase. It's estimated there are now circa 15,000 patients in the UK prescribed a range of full-spectrum products privately.

These figures are gradually increasing as more clinics open (19 in the UK) and the number of prescribing clinicians increase (over 100). Sadly, this year we have not seen any increase on the current three NHS prescriptions for unlicensed full-spectrum oils. Despite the willingness of a minority to prescribe, red tape around funding has blocked any progress.

Overcoming stigma within the clinical community is still a challenge, with prescribers relying on guidance from the National Institute for Health and Care Excellence (NICE) and the British Paediatric Neurological Association (BPNA) among other medical bodies. Their guidance brings little confidence to prescribe. This has been felt particularly within the paediatric community, with at present just two clinicians prescribing. However, with their books closed to new patients, many parents have been forced to use illicit or over-the-counter CBD products with no clinical oversight.

A key issue to access is raising awareness, with many patients and clinicians still unaware that cannabis can be prescribed. Addressing this disconnect is fundamental to much of the work patient groups are involved. With the support of the CIC, Medcan Support and Drug Science have collaborated to bring the UK's first patient conference, open to members of the public who can attend and patient testimonies.

A welcomed change would be an amendment to the current law in allowing GP's to initiate the prescribing of cannabis which would be a great step forward in opening up access.

Costs although moving in the right direction and reducing is still a significant barrier, more so in the current climate with a significant increase in the cost of living.



Patient Engagement: Matt Hughes



Supply

The UK supply chain is still dominated by unfinished and finished imports. This has seen issues with reliability and consistency of supply with many patients being informed of little to no stock and forced to use a different product. This has had, in some cases, a detrimental impact on patient's health with some stopping cannabis altogether or seeking access from illicit sources.

Transparency

At present there is no regulation for producers to supply a Certificate of Analysis. This is something both patients and clinicians would like to see changed. Cannabis is an individual medicine, and having all information available is crucial to making the most informed choices in the best interest of patient outcomes. We can celebrate a minority of producers who have recently made full certificates of analysis of all their flower available - it's a great start and we hope to see many more follow.

Patient Experience

Overall the situation for medical cannabis patients in the UK has been broadly positive, although needs further improvements. As the domestic supply of medical cannabis comes to fruition, having patient groups involved in the development of standards, research initiatives, lobbying and advocacy is a great step forward to a brighter future.

Engaging with charities

In August 2022, the CIC launched a new Working Group focussing on bringing together charities whose core missions or supporter base will benefit directly from the growth of the UK's cannabis markets. The Group will build relationships with medical condition charities where cannabis has been established as having medical benefits, such as epilepsy. The Working Group will widen this to create a network of any charities who may be willing to support a statement endorsing the further research into the medical benefits of cannabis or environmental charities who support the wider use of hemp as being of benefit to the planet.

The Group will keep this network up to date on any changes in the UK cannabis market and act quickly to lead on calls to action when a key supporter base may be negatively or positively affected by proposed legal changes.



Charity Lead: Andrew Barnes

Standards Working Group

The Standards Group was formed in June 2021 and defined its scope around key focus areas for Hemp, Cannabis Food Supplements and Cannabis Based Prescription Medicines (CBPMs):

1. Production Side Standards
2. Supply Side Standards
3. Testing & Analytical Standards
4. Environmental & Fair-Trading Standards
5. International Trade Standards
6. Sector Specific Standards
7. Guidance & Complaints Standards & Procedures

Each of the key areas of focus will seek to:

- Clarify existing standards within legislation or official guidance documents and make these available where possible in plain language to members
- Identify areas where standards do not exist, conflict, are ambiguous or unworkable (gap analysis)
- Engage in dialogue with responsible agencies to discover the evidence base for contentious legislation or standards
- Liaise with membership & other relevant stakeholders about such standards and commission research where evidence is missing
- Publish research and submissions to support legislative or administrative change and public education on standards

The timeline for the first year was limited to points 1,2,3 & 6

1. Form Standards Sub Groups (Hemp, Novel Foods CBD & CBPMs) and agree task priorities:
 - a. Completed September & October 2021
2. Review existing guidelines, preliminary engagement with relevant agencies, and engage in gap analysis:
 - a. Completed November 2021
3. Create dossiers, guidelines and identify areas of concern & brief CIC Executive:
 - a. January – March 2022
4. Commission research or partner with others on research / grants as budget allows:
 - a. Not Commenced: Post July 2022
5. Publish (website & submissions):
 - a. Completed: Legislative overview, flow-charts and gap analysis documents shared June 2022

An additional Sub Group focused on MHRA / GMP Standards has been created to focus on conflicts and gaps identified by the analysis of CBPM / Medicinal Cannabis legislation, guidelines, and relevant authorities.

Ongoing Areas of Concern

Industrial Hemp

The Industrial Hemp industry is proposing a higher 1% THC threshold for industrial hemp plants in the field. The current limit is 0.2%, and EU's new limit has risen to 0.3%. The Group believes this does not properly accommodate seasonal/environmental THC fluctuations in existing varieties. Rising temperatures and increased droughts are known to increase THC production in all cannabis varieties.

Analytical process

New UK standard proposed for hemp up to 1% when grown for industrial use, seed, and fibre, to be analysed as 'top 1/3 of the plant'.



Chair: Elisabetta Faenza

Hempseed oil THC limits:

The Hemp Sub Group believes the new EU THC limit of 7.5ppm (with variation up to 11ppm permitted) is overly restrictive and not representative of historical hempseed oil consumption. This limit will lead to loss of product due to non-compliance, increased cost for farmers from extra cleaning process and higher resolution analytical requirements and costs

The Hemp Sub Group proposes a maximum THC level of 100ppm in hempseed oil. This is in line with typical historical consumption, supported by COAs showing nondetectable at 0.01% (100ppm)

Novel Foods CBD

At the end of March 2022, the FSA released a list of CBD Products (circa. 3,000 products) permitted to stay on the market while they continue the assessment process towards 'validation'. Many smaller, UK based CBD companies viewed this as a backward step. Much confusion and chaos then ensued with publication of incorrect lists by third parties. The FSA then announced a further extension for Novel Foods validation with two deadlines, but this has not resulted in any greater clarity for either the industry or consumers. The All-Party Parliamentary Group (APPG) for CBD Products has called upon the Government to recognise the APPG as the single entity to represent the whole of the CBD industry, not the ACI. Letters of support have been submitted to George Freeman MP and the Parliamentary Under-Secretary (Department for Business, Energy, and Industrial Strategy). In May 2022, the Brexit Freedoms Bill was announced. This bill would allow ministers to repeal EU regulation. This development could spell further change as Novel Foods guidance on CBD products originated from EU guidance that the FSA adopted.

CBPMs

- CBPM products are promoted using street name 'strains' for medical cannabis products, e.g., "Gorilla Glue". This creates the wrong impression of the medical industry, especially with cannabis naive patients who are fearful of the illicit market.

Using appropriate medical naming conventions and standardised labelling and packaging conventions is a vital tool to distinguish CBPM products from historical non-prescription use and ensuring that patients understand the difference.

- There are reports that clinics may be taking advantage of an apparent vertical integration model and prioritising the prescriptions of their own (umbrella company-owned) products. This business model may put clinics in breach of anti-trust legislation that protects consumers from price-fixing and monopolies, and in conflict with pharmaceutical industry best practice
- Access to banking and insurance remains a major hurdle for the industry, with banking uncertainty retarding investment and smooth operations throughout the UK
- Drug driving legislation is impacting a range of cannabinoid products including CBPMs and CBD Novel Foods. Recent evidence shows that CBD produces no intoxication risk even with trace levels of THC present. Drug driving laws need to be updated or their application clarified to ensure these users are not caught up in roadside drug testing.

Opportunities

The Group has explored opportunities to collaborate on the development of a CIC Kite Mark. This Kite Mark would allow producers and importers to include the CIC Kite Mark on their products based on meeting or working towards the following:

- Supply Side Standards (GACP, GMP GDP)
- Environmental Standards (production, packaging & waste)
- Social Standards (community, employee, and consumers/patients)
- Economic Standards (accounting standards, pricing, and transparency)

CIC Standards looks forward to working with CIC Groups and the Executive to develop this project. The Kite Mark could become a significant revenue source and point of difference for the CIC and members, opening paid consulting and training opportunities.

Lobbying Working Group

At the start of the year, our primary focus was establishing the policy areas that we wished to lobby on. It was immediately recognised that a significant element of our work would be driven by other sub-groups within the CIC, so it is excellent that we have such a wide-ranging and varied membership of our group.

We undertook an exercise where all sub group members had the opportunity to input into our policy documents and these were run past other groups with a particular interest in the subject. Having achieved this it became apparent that many if not all of the lobbying aims were consistent with and indeed in many cases identical to those being pursued by Maple Tree Consultants and the White Paper they produced in April 2021.

It was decided by the CIC membership that it would be a sensible and efficient use of resources to support this project rather than duplicate efforts. As such the vast majority of lobbying done by the group has actually been through the Maple Tree lobbying project.

Objectives of the lobbying project

The Maple Tree lobbying project is delivering a high-level engagement plan to make the case to the UK Government to view the medical cannabis and CBD sector as something that should be embraced and supported as a matter of economic and health importance.

The approach is different from many engagement programmes that have come before, as it aims to focus directly on persuading the Government at the highest level to take a holistic view of the sector and persuade them of the huge opportunities the sector can offer the UK economy.

Summary of key actions to date

So far the project has:

- Undertaken a comprehensive stakeholder mapping exercise of Government officials, special advisers, ministers and the House of Parliament
- Identified the member of parliament for every UK-based CIC member and written to them to kick off a programme of MP meetings
- Launched Maple Tree engagement project by promoting 10 key recommendations to parliamentarians in a programme of MP meetings
- Worked with The Cannabis Industry Council to develop powerful case studies, business examples and constituency data to inform engagement with parliamentarians and Government ministers
- Written to each Government department to outline the case for cross-departmental coordination and shared CIC case studies This included individual letters to Number 10, Cabinet Office, Home Office, Department of Health and Social Care, Department of Business, Energy and Industrial Strategy (BEIS), Department of Environment, Food and Rural Affairs (DEFRA) and others
- Established ongoing direct engagement with the Prime Minister's Business Advisors
- Held meetings with key officials and advisers in the Department of Business, Energy and Industrial Strategy (BEIS), Department of Environment, Food and Rural Affairs (DEFRA)



Chair: Will de Peyer

- Continued to meet with key medical cannabis stakeholders to discuss the project and present the sector as a coherent group of businesses and organisations ready to engage with the highest level of Government
- Launched an online lobbying engagement tool to allow CIC members to have a direct and immediate impact on our work by emailing their MP
- Secured the first-ever industry-focussed medical cannabis lobbying event in parliament held on 5th July 2022

In the coming months, the aims of the project are as follows:

- To deliver huge amounts of parliamentary support through the industry focussed medical cannabis lobbying event in parliament held on 5th July 2022

- This event will:
 - Secure a network of parliamentary champions to raise the issue in the House
 - Deliver a cross-party letter to key departments signed by MPs
 - Brief MPs and Peers on the key issues for the sector
- Secure high-level meetings with officials in Downing Street and continue the programme of meetings with other departments
- Put on a roundtable event with the cannabis industry in the UK and key Government officials to make representations for the cross-departmental changes needed
- Hold a parliamentary debate on the benefits of a thriving UK medical cannabis and CBD industry. This will happen alongside a number of other parliamentary actions, including oral questions and letters



Prescription Cannabis Working Group

The Working Group has recognised that general public awareness was the single biggest hurdle to the medical cannabis industry and that millions of potential patients were not even aware that it was possible to be prescribed cannabis.

To that end we decided to understand the issues of public perception and how to overcome them .

The Problem

9 out of 10 people in the UK do not know Medical Cannabis is legal.

Awareness of the the legality and eligibility requirements for Medical Cannabis is the single biggest hurdle to growing patient numbers and transitioning prospective patients from the illicit market to safe and legal medical cannabis.

The Numbers

Canada: 0 - 370,000 patients in 5 years.

Florida: 0 - 440,000 patients in 5 years.

The UK could easily hit 650,000 patients in 5 years if we can create awareness.

Goal

Boost eligibility and Medical Cannabis awareness in the general public.

Concepts

- Patient testimonials via personal cell phone videos that are under 1 minute long
- Blogs and news articles promoting the legality and eligibility requirements of medical cannabis
- Seek out potential influencers and high profile patients who are prepared to 'go public' with the benefits they receive from medical cannabis
- Videos will be shared through all the CIC social media channels and hopefully shared by all members of the CIC
- Goal to generate ancillary news coverage - print - radio - tv- internet
- Work with patient advocacy groups and the various social media pages within the UK



Co Chair: Dr Sunil Arora



Practical Steps

- CIC needs to establish an IT framework to store and push the video stories
- Working with patient advocacy groups and the various social media pages within the UK .
- Assistance will be required to collate, organize and release in a strategic manner the videos to social and traditional media
- Seek co-operation and assistance from the patient groups and other medical cannabis lobby groups in order to make patients aware of the video story campaign
- Create a cross sub-committee dialogue and meetings with PR/ Lobby groups to convert stories into a strategic plan for creating awareness around eligibility and legality

Next Steps

We will commence work on:

- Supporting CIC profile as leading voice of medicinal cannabis in the UK, with the additional aim to expand membership including through grassroots campaigns
- An analysis of current situation for patients and potential patients in the following areas; route to NHS access, private access cost, medicine returns and labelling, LP advertising and employment
- Collaboration with Standards, Lobbying and PR Groups on Prescription Cannabis issues



Co Chair: James Smith

Hemp Working Group

The Hemp Working Group is focussed on the industrial Hemp crop and associated influencing factors, along with promoting the benefits that Hemp can have across the environment, agriculture and industrial sectors. There are key goals within the subgroup which will ultimately lead to a deregulation of industrial hemp and evidence-based research outcomes that benefit the industry's growth, longer term.

The key lobbying and research points of the Hemp sub-group are:

- An increase on the THC compliance limit to 1% THC within the fields, to mitigate the issues being caused by increased temperatures causing the natural levels of THC to increase in UK Hemp crops
- An allowance for UK farmers to be able to use all parts of the hemp crop, including the flowers and leaves, without restrictions.
- Movement of the licensing application window to Aug-Dec, in line with agricultural crop rotations and seed purchases
- Reallocation of the hemp licencing framework, from the Home Office DFLU to DEFRA
- To allow for a divergence from the current EU/OECD approved Hemp Cultivar lists, to increase cultivar selections that are available to UK farmers, optimising end use yields

Summary of the last 12 months

It has been a busy 12 months in the industrial Hemp Working Group with various milestones being achieved along the way, this is down to the energetic and constructive viewpoints that the members of the subgroup input to our discussions.

Some of the key milestones achieved:

- Through our interaction with DEFRA we have now gained the assurance and ministerial sign-offs required to enable DEFRA/UKRI/Innovate UK to fund industrial Hemp research, under their relevant funding calls
- We have been advising the secretariat to the APPG for CBD products, as part of the secretariat advisory board. Ensuring that the industrial Hemp sector is not lost in discussions around CBD products, more importantly it isn't hindered and that any changes benefit UK hemp farmers
- We are supporting NIAB in their application for research funding: Centre for High Carbon Capture Cropping Systems. NIAB are leading an application to the current Defra/UKRI funding call, with the CIC supporting the application, which was submitted 16th May and approved to proceed to phase 2 of competition
- The project will evaluate and develop the potential for increased carbon-capture, sequestration and addition of atmospheric carbon into soils. Considering above ground production of renewable bio-materials and biomass for fibre, construction, textiles, energy use and other items; replacing non-renewable or carbon intensive production materials where possible



Chair: Jamie Bartley

- We have supported the successful Hemp-30 Phase 1 report, providing evidence and data to the project, which was led by York University. It was funded by BEIS and the outcome report is a road map on the requirements to scale the UK hemp cultivation from the current 800 hectares grown annually to 80,000 hectares by 2030, which would sequester 1.6m tonnes to atmospheric carbon annually

Goals for the next 12 months

We are looking to continue the excellent collaborative work of the subgroup, that has allowed us to achieve so many of our initial goals, along with continuing to collate research data that can be used to evidence the socioeconomic and environmental benefits that a thriving UK hemp industry can provide.

Some of the key focus areas:

- Continue to build and diversify the conversation with Westminster, encapsulating all the major industrial areas that Hemp can benefit
- Work with DEFRA on co-design, around the ways that hemp can be shown in its true value under the ELMS schemes, validating the bio-diversity net gain, carbon sequestration and sulphate removal impacts
- Educate the wider agricultural and finance sectors around the benefits of utilising hemp in a crop rotation, food security, improved crop yields and green sustainable infrastructure investment opportunities



Plant Science Working Group

Established in December 2021, the Plant Science Working Group was set up to provide information to answer key questions and provide understanding about the biology of the cannabis plant. By extension this covers all aspects of plant life from genetic selection and germination through cultivation and phyto-chemical outputs.

The initial goals/priorities

Priority 1 – Phenotypic plasticity

- Create a body of evidence detailing the variation in outputs from genetically identical plants
- Present rationale that explains this variation both from a research perspective and a cultivation perspective
- Suggest methods of optimisation, pushing towards higher levels of consistency from a plant management perspective

Priority 2 – Future proofing UK cultivation

- Disease/Pest management customised to UK
- Expectation of the genotype
- Regenerative and sustainable growing practise (ESG Group)

Priority 1 – Phenotypic plasticity

The major challenge which the sub-group seeks to address first is within the variation from the cannabis plant's outputs.

As it pertains to medical use, the need to have precise ratios and concentrations of cannabinoids is an ever-present facet of our emerging industry. However, the combination of numerous influential environmental variables with a highly reactive and adaptive species, results in a plant with a wide level of chemophenotype (chemotype) variation.

This variation is not well controlled or predictable at the genetic level and has a large environmental component resulting in temporal and localised shifts in gene expression. This is of the highest importance due to the fact that from grow site to grow site, using the same cultivar may result in radically different outputs at the chemotype level.

This must be a factor when advising policy and regulations, as well as the pharmaceutical companies onboarding medicine, companies looking at cultivation and the larger groups associated with the industry.

Summary of work

In order to address this challenge, we first sought to gather data from which we could build an argument to show how variable the cannabis plant can be. The remit for the data was simple - same genotype, same environment. This data would provide the opportunity to look at variation within a genetically identical group of plants grown in the same environment. Figure one shows one data set which is presented as an example of the variation. This highlights the variation on the single metric of plant height.



Chair: Gary Yates

Plant Height data - time of year comparison

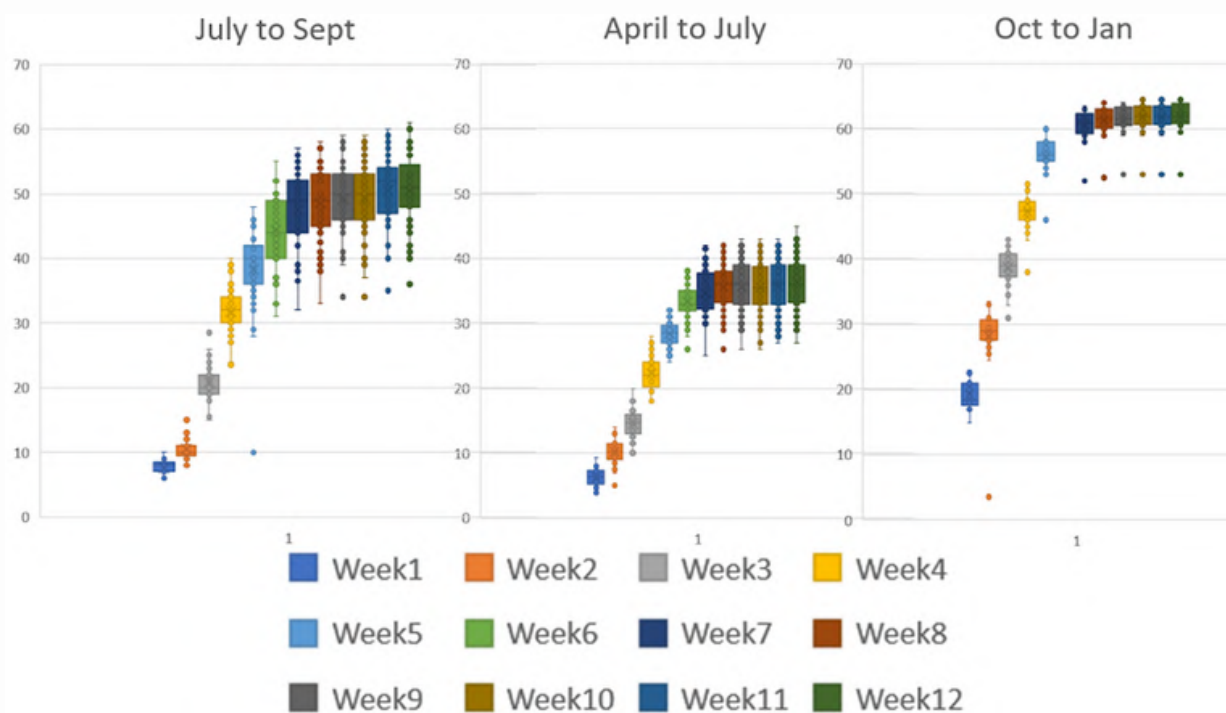


Figure 1. Example data set showing plant height variation (in cm) within a set of plants cut from the same mother plants thus, are of the same genotype, grown in the same environment. Even with supplemental lighting, the variation within a set is very large and then when compared with those grown at different times of the year, not only is the variation greater but the averages, means, and upper and lower limits are also very different. N=24.

The Group contacted journals but targeted one of the UK's premier plant science journals to enquire about the suitability of submitting a publication such as the above describes. As there are practically no cannabis-based publications from this journal group, the Group reasoned if accepted for publication here, this would be far more significant than publishing in a journal which is either not plant-based nor has published on cannabis before. After initially hitting some stumbling blocks, we were invited to submit a paper and it would be considered for review.

Talks also began with the James Hutton Institute (JHI) and the Roslin Institute (RI) about doing some testing and research at these academic institutes. The talks went extremely well with all parties in favour of working together and thus we submitted an application to secure a PhD studentship. This studentship will allow us to provide support and direct research for up to four years. Results of the bid will be published in July 2022.

Next Steps

Our next steps will be heavily determined by the outcome of the proposed PhD studentship. But either way we will press forward with the data analysis and create the publication we initially set out to produce. The sub-group will create new working groups to begin the work on the second priority of future-proofing cultivation in the UK.

Research Working Group

The Research Working Group draws together expertise in Medical Cannabis from across academia and industry.

The group commissions and directly undertakes independent scientific research including health economic analyses, condition-specific case studies, and explorations of research methodologies, as well as monitoring relevant outputs within the sector as a whole. Outputs include high impact peer-reviewed journal publications, as well as white papers.

With a strong focus on clinical research and Real World Evidence, the research group aims to further understanding of the benefits and safety of cannabinoids and associated compounds for medical uses.

The group works together towards the common goals of expanding scientific knowledge of and patient access to medical cannabis. This unity between researchers, patients, and industry partners allows for novel research funding strategies and mechanisms. This in turn facilitates the co-creation of research independently of typical investment constraints and agendas, thereby allowing the group to be fully impartial and based on scientific evidence alone.

Summary of the last 12 months

The Research subgroup has been busy developing CIC outputs. Our first key output (currently undergoing internal review) is a detailed white paper- to be followed by a peer-reviewed commentary- on the value of Real World Evidence in relation to medical cannabis. This paper has been developed jointly by the CIC and Drug Science. Please see Panel for further details.

We have also been working towards developing a full health economics analysis on medical cannabis and chronic pain. Prof Mike Barnes and Dr Anne Schlag met twice with the York Health Economics Consortium (YHEC), who submitted their proposal to the CIC (see Panel). After revising the proposal jointly between the CIC and YHEC, we now feel it is suitable for our requirements. The resulting output would be a full report, as well as the Excel model, in which we could adjust the price of products and other variables ourselves if/when needed.

The current proposal by the YHEC is very promising, and the overall cost would be just under £19,000. CIC and Drug Science have confirmed matching funding of £6000 each, and we are looking for further external funding.

Additionally, the research subgroup formed several working groups, who are continuing to work independently, updating the group at bi-monthly meetings.

Our sub groups include:

- condition-specific case studies
- research into chemovar profiles
- carbon sequestration research
- cannabinoid degradation over time

Sub group leads and future outputs are outlined on page 17.



Chair: Dr Anne Schlag

The value of Real World Evidence: The case of medical cannabis

Abstract

Randomised controlled trials (RCTs) have long been considered the gold standard of medical evidence. In relation to cannabis based medicinal products (CBMPs), this focus on RCTs has led to very restrictive guidelines, which are limiting patient access to the medicine in the UK.

There is general agreement that RCT evidence in relation to CBMPs is insufficient at present. As well as commercial reasons a major problem is that RCTs do not lend themselves well to the study of whole plant medicines.

One solution to this challenge is the use of real world evidence (RWE) with patient reported outcomes (PROs) to widen the evidence base. Such data increasingly highlights the positive impact medical cannabis can have on patients' lives. This paper outlines the value of this approach which involves the study of interventions and patients longitudinally under medical care.

In relation to CBMPs, RWE has a broad range of advantages. These include the study of larger groups of patients, the use of a broader range

and ratio of components of CBMPs, and the inclusion of more and rarer medical conditions.

Importantly in contrast to RCTs patients with significant comorbidities- and from a wider demographic profile- can also be studied, so providing higher ecological validity and increasing patient numbers, whilst offering significant cost savings.

We conclude by outlining 10 key recommendations of the value of RWE in relation to medical cannabis. We hope that this paper will help policymakers and prescribers understand the importance of RWE in relation to medical cannabis and so help them develop approaches to overcome the current situation which is detrimental to patients.

Keywords

Medical cannabis, Cannabis based medicinal products (CBMPs), Real World Evidence (RWE), Patient reported outcomes (PROs), patient access

YHEC Health Economics Analysis Summary

Aims and objectives

The CIC has requested the development of an early economic modelling tool to consider the costs, resource use and utility associated with the introduction of medical cannabis to treat pain in the UK. The model will be supported by a pragmatic search and will incorporate input from the CIC.

This economic modelling tool for those with chronic pain will be able to demonstrate the viability of medical cannabis under different assumptions. The model will be developed with a core analysis that will include the following:

- A pragmatic search in order to identify the most appropriate inputs for the model.
- Comparison of medical cannabis with standard care (as defined by the model user).
- Consideration of cost and outcomes over a one-year time horizon.
- A final summary report that will detail the inputs, assumptions and functionality of the model.

Next Steps

OUTPUT	THEMES	LEADS	TIME	STATUS
Condition-specific case studies in high impact journals	Pain and medication sparring (T21)	Dr Sutherland/DS	Ongoing	In preparation
	Rectal cancer- high THC oil	Rayvan Zafar / ICL/DS	Oct 22	In progress
	Breast Cancer	Rayyan Zafar/DS	Submitted	Case study submitted
	Endometriosis & ovarian cancer	Monique Ellis/Callie Seaman	In progress	In progress
	TBC	Lucy Stafford/PLEA	TBC	TBC
Research into chemovar profiles in childhood epilepsy		Matt Hughes/ MedCan Callie Seaman, Mazan Nicola	Jan - Dec 2022	Several oils already tested
Carbon sequestration research		Jamie Bartley	Two-year project from April 2022	In development
Cannabinoid degradation over time	Meta-analyses of data related to cannabinoid degradation	Mark Heley		In development
Special Issue on Medical Cannabis in Drug Science, Policy and Law		Drug Science	2022	In development- minimum of 20 confirmed submissions required

Ireland Working Group

The Ireland Working Group held its first meeting in May 2022 and is still in the process of building its membership.

Ireland is the only jurisdiction other than the UK in which the CIC has an interest. This is because of strong cultural and family connections as well as its close proximity within the Common Travel Area.

As a member of the EU, Ireland participates in common drugs, medicines and food strategies with free movement of goods, service and people. However, Ireland is currently defying EU law on CBD and hemp products although is likely to be brought into compliance as a result of cases coming to the High Court in summer 2022.

There is great potential for the cannabis industry and increasingly active campaigning for law reform from a young and progressive population. It remains to be seen whenever old attitudes and prejudices can be overcome. The influence of the UK is significant and the EU itself is moving forward and is likely to introduce a common medicinal cannabis strategy in the near future.

There is strong opposition to cannabis from the medical establishment, more so than in other EU countries. Short of an outright ban, the Medical Cannabis Access Programme is probably the most restrictive in the world and all products have to be imported.

Strong consumer demand supported by keen interest in establishing a cannabis and CBD industry is building a head of steam which will result in significant opportunities once the barriers are broken down. We will play our part in driving this forward through a lobbying campaign of government, political and medical audiences.

Our ambition is to see a thriving medical cannabis and CBD industry and hemp farming which at last has a clear path towards profitability and making a contribution to environmental benefit.



Chair: Peter Reynolds

International Relations

The CIC established a focus on International Relations in January 2022 to allow for further membership expansion and to report to CIC members on developments in the global cannabis and hemp CBD sector.

With the opening of global markets, International Relations Officer Sam Cannon reviews the regulation and legislation changes on a country-by-country basis. He researches and shares the impact of global transitions to legal markets, reviews best practices, and highlights business opportunities created in the process that could benefit the UK economy and CIC members.

With countries taking different approaches to what a legal cannabis industry looks like, and the speed at which this global phenomenon is happening, it is challenging to keep up to date with the impact of such legislation and fast change.

A recent example is Thailand, which has just relaxed its laws around cannabis, giving power to Thai nationals who can now legally grow up to 10 plants at home, with the caveat that they are growing for medicinal purposes. Individuals must register with the Thai FDA. Recreational cannabis is discouraged, and smoking cannabis in public could be considered a nuisance and may result in a fine or jail. The Thai government has also held back any international company being permitted to enter the Thai market until 2024, giving the upper hand to Thai companies to enter the industry without it being dominated by one major player.

Other markets opening up in Africa include South Africa, Malawi and the Democratic Republic of the Congo. If launched correctly, the cannabis industry could substantially impact developing and emerging markets where environmental and humanitarian issues such as climate change, poverty and hunger can all be tackled, solving the United Nations Global Goals.



Lead: Sam Cannon

Environment, Social & Governance Working Group

The ESG Working Group's mission is to:

- To collect data to show that CIC members contribute to UK Economy (Employment, Taxation etc), to decarbonisation throughout our supply chains and to positive social impacts through our operations.
- To suggest a set of broad Principles on responsible business conduct, open to all CIC members
- Assist each member company on its own journey to improve environmental and social impacts, developing operational metrics and setting Key Performance Indicators

Summary of the last 12 months

- Chose a globally recognised set of Principles to govern all CIC members' conduct that is accessible and appropriate to the variety of business model types in the membership. Selected UNGC: <https://www.unglobalcompact.org/what-is-gc/mission/principles>
- Nominated Sam Cannon as Sub-Group Deputy Chair
- Collected and communicated to all members a selection of examples of Members' actions to create positive environmental and social impacts, including:
 - Sourcing hemp plastic-based, child-proof, compostable packaging for flowers
 - Switched to renewable energy supplies
 - Donating used substrate (Coco) to local agricultural enterprise
 - Using Community Outreach programmes to source local labour for hand trimming
 - Offer to Plant One Tree for each prescription fulfilled
- Presented examples of projects that all members can become involved in, including the 'Eternal Flame' hemp-based cooking system to benefit some of the poorest households on the planet and ESG Corporate Reporting to demonstrate Members' achievements
- Communicated to members key points in the debate around profitability and responsible business performance



Chair: Toby Shillito

Next Steps

- Assist Members to create their own ESG Action Plans
- Continue to communicate illustrative, encouraging examples of Members' achievements on the ESG agenda
- Develop a 'toolkit' for CIC members to guide members on their own individual journeys into auditing, measuring & monitoring, reducing and communicating their environmental impacts. This is somewhat resource intensive
- Develop a Benchmark / Kite Mark – keen to support work across a number of Sub-Groups on development of a CIC 'Kite Mark' that companies can use to display their compliance with Standards in Corporate Responsibility These may range from Environmental Commitments to Responsible Marketing claims, raising Industry Standards and Employee Recruitment and Management
- Construct a Framework for CIC to aggregate Members' achievements, to show the power of collective action and to demonstrate the positive impact of the UK's nascent Cannabis Industry, particularly in terms of sustainable economic value created
- Communicate the intrinsic good of Cannabis as a way to promote wellbeing within and among humans
- Show member that a 'Ladder of Achievements' that is accessible to all: sign up to common Principles; Self-Audit on current state of the businesses' impacts / opportunities; Develop Action Plan; Take Action; Review and Repeat
- Acknowledge that some Cannabis cultivation facilities are heavy polluting industrial units, but that measures to reduce these impacts are available
- Illustrate, with examples, how ESG issues can drive profitability and market opportunities



Adult Use Scoping Group

The UK currently will only allow prescription cannabis to be consumed legally, but many countries around the world are moving to a more liberal attitude towards the consumption of cannabis for social use. In May 2022 the Mayor of London announced that Lord Charlie Falconer QC will be the chair of the new London Drugs Commission, where they will be examining the effectiveness of our drugs laws on cannabis.

The Group is examining the over 18 consumptions of cannabis for non-prescription/recreational use. Reviewing of International experiences from both a pro and con perspective and looking at how other countries have been successful and failed. This will include the supply chain, clubs/consumption spaces, stigma/miseducation along with the social impact.

Gaining an understand of the existing market, and how this will also be affected by the legalisation is one of the aims. The group will also evaluating social equality/equity within the sector around the globe and how this can be improved for the future of the industry in the UK.

We do not aim to actively promote adult use through this group, but merely understand the potential impact and risks.

Summary of the last 12 months

The AUS subgroup was formed in February 2022, during which time the group have achieved so much. The first project initiated was a SWOT analysis on why the AUS subgroup should exist within the CIC, which was presented at the AGM by Peter Reynolds in May 2022. This SWOT analysis focused on the legalisation of cannabis of adult use. A draft document has been produced with further improvements to be made before circulating within the CIC.

The final draft document which has been produced is on the topic of Effects of Prohibition of cannabis, which has been led by Simpa Carter. The document aims to highlight effects of prohibition on the cannabis community, industry, and the wider community, examining the problems, challenges, and the beneficial effect.



Chair: Callie Seaman

Goals for the next 12 months

In the coming year we hope to complete the documents outlined in the previous sections and publish them for internal use within the CIC.

The creation of a Glossary of terms used in the cannabis community and industry, will also be undertaken to allow others to understand the language used and give true definitions to terms that maybe used incorrectly. We aim for this document to be used as part of an internal handbook, from which members of the CIC can use in press releases, educational programmes, social media, and everyday conversations.

The Group also aim to produce a Risk assessment on the non-prescription use of cannabis for adults

and compile a review of how the rest of the world has dealt with the adult consumption market and how we can learn from their mistakes and successes.



