THE LEGISLATIVE COUNCIL GOVERNMENT ADMINISTRATION A COMMITTEE MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART ON THURSDAY, 18 SEPTEMBER 2014.

LEGALISED MEDICINAL CANNABIS

Ms NICOLE COWLES, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Ms Forrest) - Thanks, Nicole, for coming along. I know you have seen the terms of reference of the committee and yours is more a personal story. We have all read your submission and appreciate the challenges you face.

Ms COWLES - I have an extract from the letter written by our Prime Minister to Alan Jones, who read it on radio yesterday when he was interviewed also with Dan Haslam's mum, Lucy. This is in relation to his views on medical cannabis.

If a drug is needed for a valid medicinal purpose and is being administered safely there should be no question of its legality, and if a drug that is proven to be safe abroad is needed here, it should be available. I agree that the regulation of medicines is a thicket of complexity, bureaucracy and corporate and institutional self-interest.

I think he is referring to political and pharmaceutical issues.

Something that has been found to be safe in a reliable jurisdiction should not need to be tested here again. Clinical trials that have been done elsewhere should not have to be repeated here.

In relation to Lucy Haslam and her son, Dan:

I doubt the Haslams need a meeting; they need their problem addressed.

Alan Jones has been very supportive of the Haslams in New South Wales.

I am not here to speak as a scientist or a professional in any other capacity but as a mother who is here to represent the rights of her daughter, Alice. Our Tasmanian Health minister openly discounts the anecdotal evidence of families like mine as unimportant to the discussion in the legalisation of cannabis as a medicine. Recently he reported to me in writing, 'Personal experience is one thing and valuable perhaps at an individual level'. However, I believe it is the anecdotal evidence of brave mothers like Lucy Haslam, Dan's mother from New South Wales, and Sheree O'Connell, Tara's mother from Victoria, and other families around Australia who have told stories that have inspired a nation, which has brought about understanding and compassion and unity, and a community voicing a need for change. These families are requesting on behalf of all Australians, not just their own children, a choice for patients and their families, many of

whom have no other choice and, like my family, have tried almost every anticonvulsant medication known to man and that not only have the medications not worked to control Alice's seizures but the side effects are horrendous. This anecdotal evidence is important here because it reflects real life and the need for continual review and development of our health care, including the re-introduction of cannabis as a medication to relieve the pain and suffering of patients like our families across Australia.

Cannabis was legal here in Tasmania until 1959 and is still known to be used by many patients by their doctors for pain management and other medical issues. Our anecdotal evidence comes from a mother's love of her child and an overwhelming desire to protect the life of that child regardless of current laws and policies which need changing, so unfortunately at this time mothers like myself have no choice but to disregard law in our endeavours to save our children.

I would briefly like to present some articles from UN Convention on the Rights of the Child. According to the UN Convention on the Rights of the Child sometimes we have to think about the rights in terms of what is the best for the child in a situation and what is critical to life and protection from harm.

Article 2 states that 'all children have these rights no matter whether they have a disability, whether they are rich or poor, no child should be treated unfairly on any basis.

Article 3: all adults should do what is best for you. When adults make decisions they should think about how their decisions will effect children.

Article 4: the government has a responsibility to make sure your rights are protected. They must help your family to protect your rights and create an environment where you can grow and reach your potential and to this end shall take all appropriate legislative, administrative and other measures to the maximum extent of their available resources and, where needed, within the framework of international cooperation.

Article 5: your family has the responsibility to ensure that your rights are protected. That is my job as Alice's mother.

Article 6: you have the right to be alive. Governments shall ensure to the maximum extent possible the survival and development of the child.

Article 23: you have the right to special care if you have a disability, as well as all the rights in this convention, so that you can live a full life. Governments will recognise the rights of the disabled child to special care and shall encourage and ensure extension of assistance for which application is made and which is appropriate to the child's condition, including in relation to health care services, and including the exchange of medical treatment and other information relevant to the needs of the child with the disability and in the government's own education, improving their own capabilities and skills in these areas. So I make application for the legislation of cannabis as a medicine.

Article 24: you have the right to the highest attainable standard of health care for the treatment of illness and rehabilitation of health, safe water to drink, nutritious food, a

clean and safe environment and information to help you stay well. Governments shall take appropriate measure to diminish infant and child mortality rates, ensure the provision of necessary medical assistance and health care to all children, combat disease and malnutrition and abolish traditional practices prejudicial to the health of children.

Article 27: you have the right to food, clothing, a safe place to live and to have your basic needs met. You should not be disadvantaged so that you cannot do many of the things other kids can do. Governments shall take appropriate measures to assist parents to implement these rights.

According to the UN Convention on the Rights of the Child, my Alice has the right to be alive and the right to the best health care for her individual needs, to stay well, to live a full life and so she can grow and reach her potential. Her family and her government have a responsibility to ensure these rights are met. My Alice has the right to use a medication which helps to keep her alive and well. Medical cannabis is controlling Alice's seizures and reducing her risk SUDE - sudden unexpected death in epilepsy, something we have lived with every day for nearly nine years. Medical cannabis is helping Alice to develop physically and intellectually more than ever expected, each day, every day. So the evidence from families like mine might be anecdotal, but medical cannabis is working for us when no other medication ever has. Our story is repeated by other families here in Tasmania, across Australia, and around the world, and backed up by medical research and evidence, and as of yesterday also recognised by Tony Abbot.

We set up less than a month ago a medical cannabis kids' website, or Facebook page, and this is one of the first photos we put on. Alice was taken off medical cannabis earlier this year, and in less than five days she ended up in hospital. We were discussing her 'not for resuscitation' order and whether to intubate if her condition deteriorated.

Mrs HISCUTT - Can I just ask, Nicole, why she was taken off at that time?

Ms COWLES - That is an issue I would prefer not to mention.

Mrs HISCUTT - That is fine

Ms COWLES - This is another photo in relation to Alice's development. Children with CDKL5, Alice's condition, less than 10 per cent of the children walk, and most of the children have no functional hand use. Alice is walking and she is feeding herself. Most of these children are fed through a hole in their tummy; they have severe immune deficiencies and health issues. Alice is an incredibly healthy child, all things considered. Cannabis is a powerful anticonvulsant. It is also a very nutritious food source, and it does not come with the side effects of many of the other medications that we have tried. The side effects are all positive. She is learning to walk and talk and develop.

For our medical cannabis kids Facebook page we have already had about 30 000 visits in less than a month, so I think that highlights the community's interest and support of what we are doing. We have had no negative feedback; it has all been positive. We set it up on 18 August, only one month ago. A lot of that support has been from Tasmania, but from also across Australia and around the world.

- **CHAIR** I noted your comments initially that the Minister for Health says that anecdotal evidence is only of value to a family and that sort of thing. We have read your submission that talks about your personal journey with Alice, and the other medications you have tried and failed to get effect from. The support from your medical team that manages Alice, how have they approached this, and how have you managed all that?
- Ms COWLES Obviously a doctor cannot recommend the use of medical cannabis, and there are some issues around that obviously at this stage of the process, but Alice's paediatrician has known Alice since she was a young baby. He was one of the first doctor's to assess her as a child, and he knows the research that I have done in relation to keeping Alice alive. I have travelled overseas to genetics conferences and spoken with scientists and medical experts from around the world. I have devoted the last nine years to working out how best to control Alice's seizures, and if not to be able to control her seizures then at least to be able to make her as healthy and strong as possible so that she has the best ability to recover from those seizures.

So her doctor knows me well. We have always discussed Alice's condition. I went to him with the evidence that I had at that time, earlier this year, and said nothing else works. Alice was particularly unwell at the time, and I said I want to trial it. He obviously was not able to recommend a dosage, or recommend that I trial it, but he was able to say that he supports my trialling something which has the potential to save Alice's life when it looked like she wouldn't survive.

- **Mrs HISCUTT** In terms of accessing and monitoring and that sort of thing, obviously your paediatrician is still involved in Alice's care. How do you manage that, and accessing the medicinal cannabis and also administering and monitoring?
- Ms COWLES We keep extensive records, so every time Alice is given her medication that is recorded. Any seizure activity is recorded, whether she is at school, whether she is unwell, whether she is happy, whether she is tired, all of those variables are recorded on these forms. That recording has been done since the start of her medication. So these are always passed onto Alice's doctor. He is not involved so much in what I am doing. He is more involved as having knowledge of what we are doing and supporting that.

CHAIR - And Alice is at school?

Ms COWLES - Alice was only at school four days a week because she was too unwell to attend five days a week. She is now at school five days a week, and would probably go on Saturday and Sunday if she could. She loves the other children.

One of our biggest concerns at the moment is that cannabis is a schedule 9 drug, where cocaine is only a schedule 8 drug. Will Hodgman came to visit Alice and I on Saturday and I showed him the medication and gave myself some of the medication to prove that it has no psychogenic effect. It is basically just a simple plant. At the time I said to Will, 'I feel comfortable administering this medication to myself in front you', where you never normally administer it or take anyone's medication. I said, 'But there is no way I would

snort a line of coke in front of you'. I was saying this highlights how ridiculous this argument is. This drug used as a medication is very safe, with very few side effects and lots of positive side effects. It should not be a schedule 9 drug. That scheduling should be changed.

One of the concerns with scheduling is that currently Alice's respite house is not allowed to administer the medication. She is at respite every second weekend during the day; they will not have her overnight because of the severity of her seizures. They need to do more staff training before they can cater for Alice overnight. I run my own business and I often work on weekends, so I either have to take time off work or pay someone to go to the respite house, walk Alice out to the car, sit her in the car and give her the medication and then walk her back in. It is the same with our in-home care. I work in Launceston on a Monday. I leave at six in the morning and get home at eight at night. I have to pay someone to come in because the in-home carers are not allowed to administer the medication because it is illegal and also because it is a schedule 9. Even if it were to become legal, as a schedule 9 drug it still has to be administered by a registered nurse.

- **Mr GAFFNEY** I read your submission and it talked about the positive side effects. Have you noticed any negative side effects of Alice taking that medication?
- Ms COWLES You know when you are unwell with the flu for a week or two and you do not realise how unwell you are until you recover? That is probably the thing I have noticed most with Alice. I knew she was unwell but we lived with it every day for nine years, so it was just part of our lives. Now that she is recovering and is healthier and happier in herself the thing I am noticing most is that no-one should live in the state Alice was in before she started on the medical cannabis. We originally trialled medical cannabis as an anticonvulsant, but the positive side effects are increased health and wellbeing and increased physical and intellectual development. A friend dropped around this morning and Alice walked up and gave her a hug good morning. She had only seen Alice two or three months ago, and she cried.
- **Mr FARRELL** It seems like the effects have been quite dramatic. Has it surprised you how effective the change has been?
- Ms COWLES I think possibly the hardest thing in fighting for medical cannabis to be legalised is that I want to be able to tell people that this is a miracle, it is amazing, but you can't use words like that when you're trying to put forward an argument for something that has real medical benefits because it sounds like you're selling snake oil, and that's not what we're doing. To all intents and purposes, it really is a miracle the difference in Alice's overall health and wellbeing.
- **Mr FARRELL** Prior to this, how many different kinds of medication had you tried unsuccessfully with Alice?
- **Ms COWLES** Alice is nine, so she has had periods of medication, but we would have tried 10 or 15 different medications. The problem with anticonvulsant medications is that everyone knows of Epilim and the other commonly used medications which control some seizure types, and people are very lucky if they get control on these medications.

The worse and less controllable the seizures are the further down the list of drugs we go, and the further down the list of drugs the worse the side-effects.

We are not talking about a medication like an antibiotic that you take for a week or two, we are talking about a medication that someone is on for their entire life often. It is not just the side-effects of the individual drugs that is a concern, even though these are enormous, but what often happens with seriously ill children and people on cancer treatments, and so many other treatments, is that they are not just given one drug at a time. We talk about the side-effects of one drug but most of these young children on anticonvulsant medications for uncontrolled epilepsy are on three or four different drugs, so it's not just the side-effects of this drug, it's also the combination of the side-effects and interaction between those drugs, which makes it even more frightening.

- **Mr FARRELL** You mentioned some of the side-effects and it must be difficult for you, but what type of side-effects has Alice suffered whilst being on the previous medications?
- Ms COWLES No seizure control was obviously a concern but often these children are so overmedicated that they're almost comatose. A lot of the children are just unresponsive. I remember when Alice was little and someone saying to me, 'She just isn't paying any attention to me,' and I felt like saying that's because she's absolutely sedated on high doses of medication. Vomiting, diarrhoea, that dysfunction sort of thing, and there is always the risk of her emergency medication, Midazolam, which is quite a commonly used medication we use only if she stops breathing for more than 30 seconds or if the seizure continues or is so atypical that we feel the medication is necessary. There is a risk with that that you can stop breathing and your heart will stop. There are risks with all medications but unfortunately with anticonvulsant medications for children with uncontrolled seizures the side-effects are horrendous.
- **Mr FARRELL** So the previous medication stabilised her to a certain extent but there was no improvement, whereas with the cannabis treatment you are seeing improvement?
- Ms COWLES Some of the medications did stop the seizures for what we call a honeymoon period. Sometimes they will have a week without seizures. Some of them did lessen the severity or duration of a seizure but usually over time the benefits of the medication would wear off. With the medical cannabis the difference was almost instant. She went from having 20 seizures a day and being particularly unwell we thought we would lose her earlier this year to trialling the medication and within a week she was sitting up on my paddleboard down at Browns River. She's not standing yet, but that'll happen this Christmas, this summer. The difference was quite marked. The side-effects of the other anticonvulsant medications are all negative. The side-effects of cannabis as a medication are all positive.
- **Mr FARRELL** How does Alice feel about the treatment? Is she more accepting of taking this treatment over the other treatments? I know what it's like trying to give kids medicine -
- Ms COWLES If I try to give Alice Panadol and she doesn't need it, it's not going to happen. If I'm a couple of minutes late with her medical cannabis she will actually come

to me and tell me in her own sounds that it's time. Medical cannabis needs to be taken regularly. It's not long-acting in your system - we think it is about four hours that it lasts for - so every four hours she has it and she seems to have already developed a body clock where she recognises and can feel it in herself that her levels are low.

A good example would be a fortnight ago. We had a sleep-in and usually she has her first dose at 7.30 in the morning and we didn't have it until 9.30 so she was two hours late. Her night-time dose is suspended in oil and is slower-acting over a longer period of time, so the 7.30 dose is important but we gave it to her two hours late so her levels were already fairly low in her system. Due to some unforeseen circumstances, I missed her 11.30 dose - I've never done it before - so her levels were low with the late dose and then we missed a dose. At twenty past three, 10 minutes before her afternoon dose was due, she had a seizure and spent the next 24 hours having seizures. She has the most horrendous marks on her hand from where she bit her fingers, and it took us that 24-hour period to get the procedures back under control, get her medication levels back up to being stable, and she hasn't had a seizure since.

Mr FARRELL - I imagine the other medications are fairly costly?

Ms COWLES - Yes, the cost of having a disabled child is, you know.

Mr FARRELL - Well I don't, fortunately.

Ms COWLES - But that is why I keep my business running, so we're okay. At this stage we get our medication through Mullaways and it is sent out to us free of charge but one of my concerns is that we don't know if that supply is going to continue.

CHAIR - Just on that point, one of the concerns and criticisms or fears of those who are reluctant to proceed down this path of regulating it perhaps or how you regulate it - do you have concerns about the quality and the consistency of the formulation that you get?

Ms COWLES - That is actually a really good point and one of my biggest points is that I think we need medical regulation and dispensing, especially for children. I think if you are maybe taking cannabis as a support to your cancer treatment it might be less important to have it so strictly medically regulated because you're using it for pain management and I think the ratios of CBD to THC are less important. With children or anyone with epilepsy, I think the general consensus is that it is the CBD in the cannabis that is most likely to control the seizures because it seems to be quietening the electrical and chemical activity in the brain. That is our current understanding.

What we want for seizure control, especially for our children who we want to keep as safe as possible, is a high-CBD product, closer to a hemp product, with lower THC levels and we definitely don't want to them be exposed to the psychoactive activation of cannabis. I think for children it is particularly important to have it medically regulated. I heard from an American doctor the other day that cannabis, like any crop, is susceptible to climate change and variables, so if you think of wine you can have one vineyard and each season they will produce a slightly different wine because of the climate variables, and cannabis is exactly the same, it is a natural plant.

I am lucky that I am one of the few families who can source their product through the best source we have available at the moment, but I really don't know exactly what the ratios are -

CHAIR - Or whether they are consistent or not.

Ms COWLES - or whether they're consistent from batch to batch.

We talk about doing research, and it is nice to hear that our Government likes the idea possibly of doing some research, but I don't see the sense in researching whether it is going to work as an anticonvulsant or for cancer treatment because we know it does. I think it is more important to do research into cultivars or strains and looking at the ratios so that we can make sure we provide a really good quality, medical-grade product that is consistent and reliable, and then being medically dispensed. Once again, it is more important for children than for cancer patients, who may have a little more flexibility in the type they use, but there should be medical dispensing for children so that parents can feel comfortable knowing what dosage they should be giving. As an example, when Alice has a temperature she is likely to have breakthrough seizures, so if it is medically regulated and I have the appropriate recommendations the doctor can tell me that under these circumstances we give a slightly higher strain or a larger dose or more regular doses. I think I said in my submission that at the moment I'm a doctor, a scientist, I'm absolutely everything, and really all I want to be is a mother and maybe have a little more sleep at night and not have to talk to politicians.

CHAIR - We're not that bad.

Mr ARMSTRONG - Is it every four hours that you need to medicate Alice?

Ms COWLES - Her dose during the day is suspended in a very minimal amount of alcohol and is only 0.25 ml, so in a syringe it's not much. Her dose at night-time, at 7.30 p.m. before she goes to bed, is suspended in oil and that is 1ml, so it is slightly larger and it is slower-acting in the oil.

Mr ARMSTRONG - In the oil it releases slower.

Ms COWLES - But also there may be changes because she is sleeping so it does not need to be quite as -

Mr ARMSTRONG - There is a medical-based cannabis tablet now we were talking about earlier on. Have you ever tried that?

Ms COWLES - That is Sativex which is \$800 a month, it's not currently available and I think it's only for MS sufferers. There is a medication I think the Victorian government are talking about trialling. It has been trialled in America called, and it has a couple of different names, depending on its use, but I think in children's epilepsy it is called Epilex. That is a cannabis-based medication which is low-THC high-CBD and has been trialled quite successfully in America.

CHAIR - Do you know whereabouts in America, Nicole? Which of the states are using it?

Ms COWLES - I could give you a link to a site. I think there are a few states involved in that and it might be what the Victorian government were talking about becoming involved in these trials. One of the other concerns with trials is that if we do a trial just with children with Dravet syndrome, like we know of in Victoria, or if we do a trial just on paediatric patients, what about everybody else?

When I was asked to go public in relation to our use it was obviously quite frightening. I agreed to speak out publicly because I thought we were probably more likely to be protected legally if everybody knew what we were doing, but I don't think I was prepared for what happened after that. From the minute I spoke out publicly I've been absolutely swamped by media and stories from other families here in Tasmania, across Australia and around the world. People aren't just calling me and chatting about their children because we have a common ground. There is a lovely lady I have spoken to a couple of times who is 70 and has severe chronic pain because of scoliosis. She is suicidal. I spoke to her once and she wanted to know where she could get it. I said I obviously couldn't supply her with anything or make any recommendations because I don't have those capabilities. She called me only a couple of weeks ago and I basically spent an hour counselling her and making her promise she would go to her local health centre the next day and I gave her a couple of jobs that she had to do because she was in so much pain and has been for so long. She is 70. She is not a candidate for surgery. She is in so much pain that she doesn't want to keep living. How is it fair that we should be saying that cancer sufferers in New South Wales can use it without risk of legal action, but not this 70-year-old lady.

There is another young man who contracted me early on and his girlfriend is 28 and dying of cancer and he loves her so much he doesn't want to see her die in pain. These are the real stories that come up over and over again. Originally I spoke publicly because I thought it would help to protect Alice and me with what we were doing, but it has become bigger than that. I think this is a such an important issue. People who don't have a choice, people who are suffering every day in ways that most people who don't have that to worry about can't begin to imagine or understand, these people should have a choice. When no other medication has worked, medical cannabis may not work for them, it may not be the complete answer for them, but they should have a choice to be able to trial it.

CHAIR - It is about quality of palliative care, isn't it?

Mrs HISCUTT - Nicole, thank you very much for coming in; you are obviously the go-to person with your Facebook page on all that stuff at the moment. In Tasmania, and maybe in Australia, as you discussed, how many people in the same situation have made contact with you?

Ms COWLES - How many people have contacted me directly?

- **Mrs HISCUTT** Who you feel are in Alice's situation who could benefit from this? In Tasmania, would you say there are 10, 20, 30?
- Ms COWLES Week on, week off, I would say there are four children in Alice's respite house, so out of them, 100 per cent. Alice is at Southern Support School. Maybe it is 80 per cent across Australia.
- **CHAIR** This is children with a rare condition you're talking about?
- **Mrs HISCUTT** I was asking whether perhaps on your Facebook page someone would be saying they know or have a person or a child with this condition. In Tasmania would you be aware of a figure of people would benefit from this medication?
- Ms COWLES I would have no idea of figures. It is because we're not just talking about one type of condition, we're talking about a range of health conditions, some that have already been identified. One of the things I said early on and I have spent a lot of time in the paediatric unit at the Royal Hobart Hospital is that a large percentage of the beds there are taken up by children with anorexia and high-CBD, low-THC closer to the hemp-type products are very good at encouraging appetite. They're also a natural food source, so they're nutritious. When we talk about hospital waiting lists, we could probably make a significant difference to bed availability in the paediatric unit.
- CHAIR One of the concerns that has been raised in other submissions is that the medical profession tend to be a little bit nervous in this area because it is a schedule 9 drug product, as you say. We often look at the Cochrane database, and I am sure you have probably looked at that as one of the most preeminent databases in terms of medical research. One of the comments others have made is that there is limited research of the current nature in that, and when I was reading through it I was thinking part of that could well be because it has been illegal. It's really hard to conduct trials with schedule 9 drugs and there seems to be a bit of dearth of research over that time.
- **Ms COWLES** It's difficult to even get tinctures tested because it's illegal. Even the laboratories at our Tasmanian university which have the resources to test the medication for us are not allowed test it. Legally they are not allowed to, even though they have an amazing set-up there that is first-grade as far as technology and capacity is concerned.

Cannabis was de-legalised in 1959 here in Tasmania but I spoke to a gentleman whose brother had an illness which required multiple drug transfusions and he contracted AIDS at the Royal Hobart Hospital back in the 1980s. His treating doctor there - and I am sure it was not written on the script - recommended cannabis to relieve his pain symptoms. I know of many doctors, not to mention any names, who have patients they are treating for cancer, and either the doctor recommends they use cannabis or the patient tells them they are using cannabis. They are telling them it is the only thing that can help manage their pain and nausea and combat the side-effects of the currently available pharmaceutical medications available to them.

- **CHAIR** There is a move in New South Wales, as I understand it I have not had a chance to have a proper look at it yet to decriminalise the personal use of cannabis for the terminally ill. How do we define 'terminally ill'?
- Ms COWLES That's where it's not really fair. In New South Wales they are supporting the push Lucy Haslam has put forward for the terminally ill and in Victoria they are supporting paediatric seizure control because of Tara O'Connell and the families in Victoria. To my mind we now have the public awareness and acceptance and we have the Federal Government go-ahead, so to speak. In Tasmania we have the ideal growing conditions. We have the poppy industry and I was a poppy farmer until I sold my farm earlier this year, so I know that industry well which means that growing medical cannabis would be a great adjunct, especially if it is opened up to the mainland and we lose our monopoly on the poppy industry. It is important as an industry for Tasmania and we already have the systems in place to make it safe.

One of the things we could do here in Tasmania is lead the way by looking at it as a medication available to all people who need it, not just specific conditions or specific populations, and not wasting time on research that has already been done or redoing information that has already been done. It is more about doing the right research into the appropriate cultivars and ratios and making it available to anybody who needs it, not discriminating between conditions or populations.

- **Mr MULDER** You mentioned the supply, and I do not want to go too far down the source of that supply, but what assurance do you have of the quality and consistency of the cannabinoid you are getting, that they are free of contaminants et cetera?
- **Ms COWLES** You would be amazed how many times I have asked myself that same question. I am fairly sure of getting a safe product at the moment because Tony is so committed to improving the image of cannabis as a medication and producing it for seriously ill children and families. I think we are fairly safe that he will, to the best of his ability, provide us with the best quality product he can. My argument is, however, that season to season and batch to batch there can variables. That may be less important when it comes to cancer treatments or other treatments -
- Mr MULDER This comes down to the regulation of the manufacturing side of it.
- Ms COWLES That is why we need regulation and medical dispensing. We need to have a best-practice model and rules and regulations to ensure a good quality medical-grade product. I have thought about this and compounding pharmacies would be a great way to dispense the medication. Compounding pharmacies are located across Australia and they can make up any medication you want to your personal request without the artificial colours, flavours, fillers and additives that some people react to. Alice is particularly susceptible to artificial colours and flavours which disrupt her gut function, so I use a compounding pharmacy sometimes if I need medication. A compounding pharmacy could make up a clean, natural product of medical cannabis that can be medically regulated and tested, but without the pharmacological intervention most people would like to avoid. I am trying to be politically correct here.

- **Mr MULDER** What steps did you need to go through in order to obtain it? Did you have to satisfy any criteria, or just ask?
- Ms COWLES I think I was lucky. Tony Bower's crop was discovered by the police some months ago and 73 plants were found, each one with a child's name on it, including Alice's. I contacted Tony through his website and we had to provide some information on the severity of Alice's condition and he sent the product out. I think I am one of maybe 150 at the most. I think he now mainly treats children with epilepsy and Dravet syndrome in particular because he really wants to make a difference to these children, but I think he has hundreds of thousands of people contacting him each week wanting to access his product.
- **Mr MULDER** That leads me to my next area. Are you aware of any legal actions? You have just described one but what about the end-users? Are you aware, through your contacts and networks, of any action against people procuring?
- Ms COWLES There was a family in Victoria who were raided because someone made a formal complaint. My understanding is that there is a fair chance DOCS and the police know that I'm using medical cannabis but unless someone makes a formal complaint they're unlikely to act. In Melbourne someone did make a complaint about this family, the police went to the house and confiscated the medication and DOCS went to their house and had a cup of tea and a chat.
- Mr MULDER So you haven't had the drug squad raid you at dawn or anything?
- **Ms COWLES** No. They'd be really disappointed if they came to my house. I make muffins. As I said, that's why I agreed to go public initially, because I thought that would -
- **Mr MULDER** These are important reasons we need this to be medically regulated and manufactured under strict laboratory conditions.
- **Ms COWLES** Absolutely, and we need an agricultural industry set up to ensure we get the best quality product.
- **Mr MULDER** I note the convention on narcotics has exactly the same requirements for the opium poppy as it does for growing cannabis so in that sense I think we're better set up because we already meet all the requirements.
- Ms COWLES I think Tasmania is the ideal spot, and also not only just meeting the requirements, we have just spent an absolute fortune putting water through the midlands. If the poppy industry is opened up to the mainland we will lose that monopoly and I very much doubt many poppy farmers would be opposed to this because I know when I was a poppy farmer I thought we needed another alternative crop in case things changed. This is a less risky crop. I don't know how much you know about poppies but it's a high-cost and high-risk crop, so it costs a lot to produce and is really easy to destroy. If you don't water it or get a heavy frost or if it rains before harvest the alkaloid content is washed out and your poppies are much less valuable. If you get a good crop the returns are good but

if you don't the returns are much lower. They call this 'weed' because it's pretty easy to grow, it grows well. As to its return, I just read a document by Troy Langman about Norfolk Island in relation to this issue, and I think he was talking about \$1 million an acre in terms of return.

- **CHAIR** They don't have a lot of land over there so they have to maximise it. Is there a model around the world in terms of regulation, growing, producing and dispensing that we could look at in your research?
- **Ms COWLES** There are multiple models. Australia is one country leading the way in research. They use it in hospitals and nursing homes to assist with age-related illnesses. Israel, Canada, some states of America, the Netherlands and a few other European countries, so there are lots of countries who have.
- **CHAIR** Is there a particular model that you think is particularly good on the work you've done?
- **Ms COWLES -** I'm probably not the best person to ask. Troy Langman, who I think is speaking on Monday, has done the research. He has an amazing team of people behind him who have done the research so someone like Troy would be appropriate to answer those questions.
- **Mrs HISCUTT** Nicole, are you comfortable and satisfied that medical cannabis, with the combinations and in conjunction with the other medication, is the sole thing that has made the difference?
- Ms COWLES Alice is on no other medication currently; she has been weaned off. She was on Zonegran, which is the one I reported in the submission that was so completely toxic and she was weaned off that in the first two months. Whenever you have a toxic medication like that you either have to titrate the levels up or down very carefully. You cannot stop a medication like that or the side effects are toxic, so it took us maybe two months to wean her off that medication and titrate the levels down for it to be out of her system. They compete with each other. Cannabis and the Zonegran are known not to interact well together, but she has been on no other medication since then.
- **CHAIR** Nicole, thanks very much for taking time out to come and speak to the committee. We really appreciate the frankness with which you've provided the evidence.

Ms COWLES - I appreciate being given the opportunity, thank you.

THE WITNESS WITHDREW.

<u>Dr ERIC RATCLIFF</u>, RANZCP TASMANIA BRANCH (ROYAL AUSTRALIAN AND NEW ZEALAND COLLEGE OF PSYCHIATRISTS), WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

- **CHAIR** Thanks, Dr Ratcliff. I know you have appeared before the committee of this nature before but I will just go through procedure again for you. The evidence you are giving to us is recorded on *Hansard* and becomes part of public record. What you say to the committee is covered by parliamentary privilege. You have seen the terms of reference, and we have also received your submission. If you would like to speak to that submission the committee will then have some questions for you.
- **Dr RATCLIFF** The college wishes to inject a note of caution into the process. We are not hostile to the idea of medical cannabis provided that the evidence for its use is good and that it is appropriately controlled. There is concern that much of the evidence that has become public at least is what is described as anecdotal, that is to say it represents the opinions of people on a particular case and not a large trial. There is a body of literature available around the world where trials have been held.

The difficulty in all of this is that botanical cannabis is a mixture of a large number of drugs, about 100, and the unlawful supplies have been selected over about 40 years to have a high yield of tetrahydrocannabinol, or THC, and a relatively low yield of other agents. It is most important if medical cannabis is grown it must be grown from stock that does not have that particular selection and it must be batch-controlled so that there is a good idea of what is in a particular preparation. We are advocating that there should be appropriate scientific evaluation or a review of what scientific evaluation has been done. That is the most important thing.

The second thing is that much of the publicity surrounding the introduction of medical cannabis has tended towards giving the public the idea that this is a very safe drug. In psychiatry we are very much aware that it is very unsafe in a number of ways. Preparations containing a high proportion of THC are associated with psychotic reactions and the most serious one is the accumulating evidence that if it is used by children or adolescents, particularly around the age of 14, there is a greatly enhanced risk of developing the most serious psychosis, which is schizophrenia. Thirty years ago it looked as though schizophrenia was starting to fade and become less common and less severe, but over the last 30 years it has become more severe and more common. The basis of this is that probably approximately one in 10 of us have inherited the genes that make us susceptible to schizophrenia. It is not the cause of it, but there is a susceptibility in about 10 per cent of the population.

CHAIR - Can you be tested for that gene?

Dr RATCLIFF - No, not at this stage, but about one in 10 of those who have that susceptibility develop the disorder. That is approximately 1 per cent of the population, and that was the figure that was quoted for probably about 50 years.

The prevalence seems to have increased somewhat and there is accumulated evidence that the use of cannabis in adolescence greatly enhances the risk of developing that

disorder, which is the most serious mental illness. It means a lifetime of problems for the patient, their carers and relatives. It is a major cause of homelessness, imprisonment and a great disruption to people's lives.

CHAIR - Is it fair to say, then, as a psychiatrist and a body representing psychiatrists, generally, that you deal more with people with psychiatric illness as opposed to people with epilepsy or cancer or some of the other conditions that are claiming the benefit of the use of medicinal cannabis?

Dr RATCLIFF - Yes, but we see people who have those other conditions as well.

CHAIR - One of the points made by yourself and some others is that there is a bit of a gap in the research available, particularly in more recent times, but isn't part of the problem the fact that it is an illegal product?

Dr RATCLIFF - That is a problem, yes.

CHAIR - So it becomes a vicious cycle; it is illegal so you cannot conduct research. If we are going to go down this path where there is anecdotal evidence that it does work and work well in some cases, the only way we can ascertain whether that is true or not is to make it available for research.

Dr RATCLIFF - Yes, that is essential.

CHAIR - Yes, that is the first important step.

Dr RATCLIFF - That is the most important step.

CHAIR - We all agree on that. It was a no-brainer in my mind anyway. I do have a medical background but not to the extent that you do in this area, so please excuse my ignorance. You talked about the gene that one in 10 of us carry that makes us more susceptible to schizophrenia. Is that schizophrenia generally, not just as a result of using cannabis?

Dr RATCLIFF - No, but the evidence is that the use of cannabis increases the risk considerably.

CHAIR - In that one in 10?

- **Dr RATCLIFF** The theoretical basis is that one in 10 are at risk from it. We are not saying that it will invariably cause it, we are saying that some people are at high risk of that occurring, and for them it may be devastating.
- **CHAIR** I agree with that. You said that we can't test for it so how do we know there is a gene if you can't test for it?
- **Dr RATCLIFF** There has been a huge amount of research over the years to try and find the cause of schizophrenia. One thing we can say is that the more closely related you are to a person with it the more likely you are to get it. On a statistical basis there is good

evidence of a genetic basis that it occurs more often in some families than others. The risk for an identical twin, for instance, is about 70 per cent, but it is not 100 per cent so there must be some other factor involved. There are other peculiarities that turn up. For instance, in the temperate zones in the world you will see [inaudible] may have something to do with whether you get it or not. That is a bit mysterious.

CHAIR - That is for us then in Tasmania, the temperate part of the world?

Dr RATCLIFF - Yes.

CHAIR - What month is bad? I just need to check.

Dr RATCLIFF - It is advisable not to be in your mother's tummy during winter.

- **Mr GAFFNEY** You did say an appropriate time for a review and evaluation and when I hear something like appropriate time that is like how long is a piece of string. Best case scenario, if you were able to start how long do you think a review and evaluation would take before it would satisfy or come to a conclusion? You hear that quite often, an appropriate time, and I am wondering what is the time frame?
- **Dr RATCLIFF** I don't think it would be very long. There have been some good reviews done, in particular one by Dr Wodak in Australia of the world literature on the matter. I think it just means to get commissioning of a competent academic to produce a report on the available world literature to evaluate what is available there. I think that would be a fairly short process, probably involving a few months.
- **Mrs HISCUTT** Are you indicating that the information is already there; it is just a matter of correlating it?
- Dr RATCLIFF There is some information there. I think there is probably sufficient information in the world literature to justify an appropriate trial. The problem then is to characterise the drugs that are in a particular preparation. We need to find what other ones we want that produce the desirable effect. The ideal thing would be that the various drugs are extracted, as is the case with opium where we get a pure preparation of a drug that is known to produce a particular effect. Obviously the drugs that are in botanical cannabis are a fairly versatile bunch; it is not that all of them do the same thing. There are some that produce psychosis. THC is the leader of that. There are some that are antipsychotic and the breeding out of those maybe why the present unlawful supplies are so dangerous. There are some that are antinauseant, which are going to be useful for cancer patients on chemotherapy, and there are ones that may be anticonvulsant, although that is a bit more problematical.
- **Mr GAFFNEY** I am interested when you said two or three months because the material is there. Would you see that you would need a team of three of four? If there was a recommendation or something from the committee process, how would you see that working and would you have the people here in Tasmania that could do that study?

- **Dr RATCLIFF** I am sure there would be. It is somebody who is capable of evaluating literature appropriately; that is what is needed. I do not think it would need to be a committee job. I think if you commissioned a single academic to do this work, a pharmacologist preferably, a single person could produce the report.
- Mr MULDER I noticed in your submission you talked about schizophrenia and you also mentioned road safety issues associated with the usage of cannabinoids. These are issues that occur already because, although it is unlawful, it is readily available. I am just wondering about not launching down the path of providing it in medical doses so that we know what is in there and we prescribe. Legalising it would give you a control group on which we could do our own particular studies about the impacts of what combinations of and what medicine causes what thing. Although you warn about these other things, how would you see that a trial based on legally supplied medicine would not be a good idea for Tasmania?
- **Dr RATCLIFF** I think it probably would be a good idea, but it must be a proper trial. It must not be based on a few stories that tug at the heartstrings or on very limited evidence of that kind. It needs to be properly scientifically evaluated for lawful use.
- **Mr MULDER** That is what I am trying to get at. If we had a quality product where we knew what was in it and then we could go and dispense it to these people who are claiming these benefits for it, that would constitute a trial, which we cannot have unless we legalise it. It seems you are basically saying there is an argument here for legalising it, even if on a limited basis in a place like Tasmania where you could get rigor around the laboratory production of these substances, rather than smoking a joint of unknown quantity and substances from your local dealer?
- **Dr RATCLIFF** It should be as lawful as opiates and it should be as well controlled and characterised as opiates.
- Mr MULDER I would just like to get your view on the parallel that can be drawn between the way we dispense alcohol compared to the way we used to dispense alcohol. Now we have made it legal and have brought it under a regulatory framework where you must state the percentage of alcohol on the bottle and it must not contain contaminant ingredients. You can then regulate the supply, recognising that it still does enormous social harm and damage. I am just wondering whether you think it is better that we have a regulated supply of this stuff rather than an unregulated supply.
- **Dr RATCLIFF** I think a regulated supply is always preferable, but as things are now with it being unlawful it is in very wide use and unregulated. How we rein that back is the problem. I think at the end of our submission we put in a caution about the general question of legalisation of cannabis. Prohibition of alcohol in the United States it was a silly idea, but the western drug problem is largely a product of the fact that all those gangs had been set up on a very profitable industry and suddenly their profits were taken away from them, so what did they do next?

Mr MULDER - The next illegal substance.

- **Dr RATCLIFF** Our concern now is that if we legalised all the unlawful drugs tomorrow what would the people who are profiting by it so much do next?
- **Mr MULDER** One of the problems you have if you legalise a substance is that the drug dealers would not like it because the price would go down considerably.
- **Dr RATCLIFF** But they would not retire.
- **Mr MULDER** What I am saying is the harm is there. It is a question of minimising it. We cannot avoid it, so maybe this is the way to do it.
- **Dr RATCLIFF** I think the analogy with opiates is probably fairly good. We have a substance that has wide illegal use and a very valuable lawful use, but it is appropriately controlled as far dispensing is concerned and the quality of the product. The problem with botanical cannabis is that each batch is going to have different combinations. I suppose the gold standard will be to get the individual substances that do the things that we want, and in the meantime the mixtures need to be controlled to the extent that each batch is tested for the appropriate quantities of what we want.
- **CHAIR** You talk about the importance of having a literature review, which would not take that long. A couple of other submissions have pointed to a number of literature reviews, one by ATHA in 2006 and others. Do you think there has been enough done or do we need someone to look at all of these?
- **Dr RATCLIFF** We need someone to tie it together and look at the varying quality of them.
- **CHAIR** Are you saying that you think there has been a substantial body of work done, it is probably all out there, we just need to tie it all together.
- **Dr RATCLIFF** There is a lot out there. A lot of it has been done on mixtures of drugs and therefore we are not sure what is doing what.
- **CHAIR** It is a case of polypharmacy anyway, isn't it?
- **Dr RATCLIFF** It is. A few of them have been done on individual substances, but generally around the world, research has been inhibited by its being unlawful.
- **CHAIR** You may not be able to answer this, it may be for others, but being a schedule 9 drug means that you can't conduct research using it and that sort of thing. Do you understand the history of it being listed as a schedule 9?
- Dr RATCLIFF Some of it.
- **CHAIR** Can you tell us what do know about it? I am just interested in how it got to there, and why you have suggested it should be an S8 really.
- Mr RATCLIFF We followed the United States, as we followed them into Vietnam -

- Mr MULDER And Afghanistan and Iraq twice.
- **Dr RATCLIFF** Yes. They became exercised about this substance and it is a nation which was able to achieve prohibition of alcohol for a limited period of time, so -
- **CHAIR** Enough said, perhaps?
- **Dr RATCLIFF** Enough said. They certainly put pressure on the international bodies to do this.
- **CHAIR** Okay. A number of states in America have now legalised it so they have obviously softened their view and it must now be an S8 in their statutes.
- Dr RATCLIFF Yes, something similar.
- **CHAIR** So we are just a little bit slow catching up.
- **Dr RATCLIFF** Yes, but then a lot of their states are slow in catching up too.
- **Mr ARMSTRONG** I noticed in your submission you say it could have an effect with the opium poppies where people could start raiding this crop. From my belief, this is low in THC so it is not really it is more like hemp than actual cannabis?
- **Dr RATCLIFF** That would be the aim, but we need to ensure it is regulated in that way.
- **CHAIR** But you can't do that without some research into the qualities of the product.
- **Dr RATCLIFF** Yes, you have to know what the yield is in any particular batch.
- Mr ARMSTRONG So that is where more research has to be done.
- **Dr RATCLIFF** Yes, because with the unlawful supplies essentially what has happened, certainly within my time of practice, it has emerged in Tasmania from being a rarity to almost universal. The first users bought bags of canary seed, which is hemp seed that has been sterilised, put it in soil and a few unsterilised seeds came up, so the whole crop originates from that.
- **CHAIR** Really?
- **Dr RATCLIFF** In later years, there has been selective breeding for the high THC level. That is now recognised around the world as being a significant problem, so we need to go back to low yielding stock, which does still exist.
- **CHAIR** Are you aware of any jurisdictions around the world that have really got ahead in this area? From what we have read not being experts yet, but we hope to be by the end of this process the CBD component seems to be the one that should be higher and the THC lower. Are there any areas we can look at to see where they have some really good regulations and frameworks around growing and producing a product like that?

- **Dr RATCLIFF** I am not aware of any jurisdictions that have that.
- **CHAIR** So it is still a bit of guesswork, is it?
- **Dr RATCLIFF** Yes. As I say, it is the complexity of the many agents present and their interactions, the way they modify each other.
- **CHAIR** Has there been work done in looking at the interactions between recognised pharmaceutical products and cannabis? Is that a body of work that needs to be done about drug interactions?
- **Dr RATCLIFF** There needs to be a lot of study about where the drug is likely to be advocated in relation to other particular drugs. The thing that is well and truly within my colleagues' experience is that for people who are using cannabis, antipsychotic drugs become relatively ineffective.
- **CHAIR** Could that contribute to the fact that some of those people experience periods of psychosis because their antipsychotic medication doesn't work?
- Dr RATCLIFF Yes.
- Mr MULDER Is the bad guy in here the THC?
- **Dr RATCLIFF** That is the major bad guy. There are probably one or two others but that is the one that is most important.
- Mr MULDER So we need to really push that down and focus on the CBD side of it.
- **Dr RATCLIFF** Yes. There would be some strains that would be useful for nausea in chemotherapy patients, for instance. There would be some that would be useful for chronic pain, but they would be different combinations.
- **CHAIR** With the CBD, does that appear not to have an effect on the precursor to psychotic episodes or schizophrenia?
- **Dr RATCLIFF** So far as is known, it is not the agent that causes the problem but I don't think we can be certain of that until it is properly trialled.
- **CHAIR** You would need to have a randomised blind control trial, wouldn't you, and that is very difficult.
- **Dr RATCLIFF** Yes, it is difficult.
- **Mrs HISCUTT** So you are saying you need the CBD to control seizures and you need the THC to control pain is that right?

Dr RATCLIFF - No, I'm not sure which agents exactly do that because none of the preparations in use at the moment are pure, they are all mixed, therefore we can't say any one alkaloid is the one we want, we have to do the studies. There is some evidence of it but it is not complete. All the studies have been done with botanical mixtures, very few have been done with pure extracted drugs, and that is the work that needs to be done.

CHAIR - Do you want to make any closing comments, Dr Ratcliff?

Dr RATCLIFF - There is a concern that your deliberations and the publicity surrounding them is assisting the idea that this is a safe, versatile drug without dangers, and this is not the case. People who are enthusiastic about natural remedies, for instance, are very much concerned about its naturalness - it is a selling point - but there are a lot of very bad natural things. This is not necessarily a bad one but it has been put to bad use and modified in a way that is negative. We have to redress that and go back to a product that is more balanced and less likely to cause the adverse effects we have observed. We need to ensure every lawful crop is derived from appropriate plant stock.

CHAIR - Thank you very much, Dr Ratcliff. We appreciate your time.

THE WITNESS WITHDREW.

Mr EMILIO REALE, EXECUTIVE MANAGER INFRASTRUCTURE SERVICES HUON VALLEY COUNCIL, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Thanks very much for your time. The committee is in a public hearing. Obviously the media are here, but also everything is being recorded by *Hansard* and it does form part of the public record. Everything you say before the committee today is covered by parliamentary privilege, but things you say outside might not be. You just need to keep that in mind if you do speak to the media following your appearance here. If there is evidence you wanted to give to the committee in camera you can make that request and the committee would consider it.

Mr REALE - I am the acting general manager. The acting mayor was unable to attend today so I am speaking on his behalf.

Thank you for the opportunity to present evidence before you. The Huon Valley Council has provided a submission to this committee as it considers that the use of medicinal cannabis has potential for economic benefits for the Huon Valley and the state of Tasmania. Further, the information provided to the council is that the use of cannabis for medicinal purposes has substantial benefits for the treatment of persons with terminal and other illnesses.

The Huon Valley Council does not have any expertise in relation to the specific nature of the use of cannabis for medicinal purposes and for that reason relies on the information and the evidence that is made generally available as to trial results, its benefits and the experiences in other countries. For the purposes of this evidence the council accepts the information and considers that it is open to the committee to make appropriate findings based on the evidence presented to it. In particular, the council's policy position is as follows - and we had a number of resolutions presented to council, which I will read and then expand on.

One: the council welcomes the Legislative Council's inquiry in relation to the use of medicinal cannabis and commends the Legislative Council on the initiative taken in relation to this matter. The council considers that the inquiry has allowed for a mature and open debate in consideration for the use of medicinal cannabis in Tasmania. Further, it is considered that this has been the catalyst for the change in the State Government's position in relation to its willingness to consider a trial with the appropriate safeguards and measures put in place. The request for the State Government to have reconsidered its position has been part of the council's policy statement.

Two: the council supports the promotion of new industries in Tasmania, and in particular the Huon Valley, that improves the economic outcomes for residents. Unemployment in the Huon Valley remains a constant challenge, particularly with regard to youth unemployment. The impacts of changes to the forest industry continue to be felt in the Huon Valley and it is important to encourage development of new and diverse industries to promote innovative and economic improvement. Medicinal cannabis is an industry that is understood to be suited to much of the Tasmanian climate, and in particular the

Huon Valley given its availability of water and suitable farm land. The Huon Valley also has a large number of vacant former agricultural sheds which are available for use for such projects.

Whilst the Huon Valley is at present heavily reliant on the aquaculture industry, horticulture industry to a lesser extent, as well as tourism, there is a clear need for diversification and opportunity. The recent closure of the Huon Valley mushroom site which employed around 28 people in the Glen Huon, Judbury and surrounding communities has had a lasting impact on the local communities. The viabilities of schools and flow-on affects for supporting other services are also at stake. This site is well suited for the growing of medicinal cannabis. The proponent predicts that a similar number of people will be directly employed in this industry, with many others directly and indirectly employed.

Medicinal cannabis has the potential to provide economic stimulus to the community by way of jobs and economic activity. Whilst the council has a focus on economic development opportunities, it cannot understate the benefits that have been demonstrated in relation to the use of cannabis for the treatment of a number of afflictions. The Huon Valley is not immune to low health outcomes, particularly in relation to its diverse nature and lower socio-economic areas. In the period 2005-10 the total of all cancers in the Huon Valley was 414. These, along with other illnesses and afflictions such as epilepsy and seizures, the evidence suggests would benefit from the use of cannabis treatment, whether in pure or processed form. This would provide much needed relief from ongoing suffering to the residents of the Huon Valley.

Without some form of legislation or approval, persons who use cannabis for treatment may be subject to criminal proceedings, as has been demonstrated a number of cases publicised through the mainstream media. There is risk to residents of the Huon Valley and it is a matter that needs proper and careful consideration. The council supports and advocates for further investigation and consideration of the legislation of cultivation, production and supply of medicinal cannabis. This should include consideration in relation to an appropriate regulatory framework, including arrangements that need to be in place to manage foreseen risks.

Council is aware that cannabis has long been a substance drawing much attention within the international drug control regime, which is a system currently based upon the 1961 single convention on narcotic drugs. Today that regime landscape is changing. The United Nations single convention and the United Nations Convention on Psychotropic Substances 1971 have been ratified by Australia to allow the use of cannabis for medicinal and scientific purposes. Faced with particular challenges and democratic decisions, a number of jurisdictions are moving beyond merely tolerant approaches to the possession of cannabis for personal use, to legally regulate markets for the drug. In November 2012 voters in the US states of Colorado and Washington passed ballot initiatives to tax and regulate cannabis cultivation, distribution and consumption for non-medical purposes.

As the use of medicinal cannabis is legal in Canada and 23 states in the United States, and 18 countries in the European Union, it is likely that there is strong market for the

sale of the product. If Australian states legalise the use medicinal cannabis then this will also provide a domestic market for the product. The size of the market has not been accurately assessed, although Canada has reported it is anticipated that the income from sales will be \$1.3 billion per year by 2024. This is a potential yield of \$1 million per acre, a true cash crop. These policy shifts go well beyond the permitted prohibitive boundaries of the UN drug control conventions. They represent a break with a historical trajectory founded on science and political imperatives and they have thrown the global regime into a state of crisis.

Australia is a signatory to international agreements that aim to restrict production, manufacture, export, import, distribution trade and possession of narcotic drugs, including cannabis, for medical and scientific purposes. As the Commonwealth is responsible for the implementation of international agreements that it enters into and has the power to override inconsistent state legislation to ensure national implementation of Australia's international obligations, the Commonwealth would have to be satisfied that any proposed state scheme would not place Australia in breach of its treaty obligations.

Council is aware of the New South Wales upper House committee inquiry report in relation to the use of medical cannabis and sees this as an excellent starting point. It also confirms the council's support for medical cannabis trials as it has been found safe in other reliable jurisdictions, which ratifies the state Government in its current position.

The cultivation, production and supply of cannabis is currently prohibited in Tasmania and may amount to a criminal offence. Whilst a trial through the University of Tasmania may be granted by the Minister for Health in accordance with the Poisons Act 1971 for general production to provide exemptions from the current law, legislative change is required. Such exemptions would need to be introduced accompanied by a robust regulatory system. Given that Tasmania currently permits the cultivation and production of poppies for the purposes of making pharmaceutical opiates, it may be that the regulatory system already exists and could be applied in this instance.

Council appreciates the magnitude of the role ahead in developing an appropriate regulatory framework that would reduce the seen, let alone unforeseen, risk. Council supports the basic principle of having suitable legislation in place to protect authorised users and control the misuse of this drug. We acknowledge that Tasmania, by its isolation, provides a safe environment to establish a world-class model for the growing of medicinal cannabis. Council advocates for this further investigation to be undertaken as a matter of urgency due to the economic potential for this industry, because it believes it relieves ongoing suffering for a variety of conditions and people using cannabis for genuine medicinal purposes are at continual risk of criminal charges. The benefits of cannabinoids can be substantial. The risk are generally modest, but must be weighed against those not treating the symptoms, or alternative treatments.

The creation of much-needed economic stimulus for the Huon area would help keep people in the valley, attract new people and lift the general esteem of the area. This new industry would be a first for the state and the nation. It would put Australia and the Huon Valley on the map as open, innovative and a progressive player in a new and emerging market and would let the world know we are open for business. It would

diversify the skills base in the area and create new training opportunities for potential employees. It would help lower the already high unemployment rate of 7.1 per cent and create new opportunities for many families.

In Australia, medicinal cannabis currently has strong community support, with research into its use being more strongly supported. A stronger medicinal consensus is emerging. With medicinal cannabis now available legally in around 23 US states there is an undeniable shift towards recognising its pharmaceutical and therapeutic potential. The time seems right now to implement the use of medicinal cannabis in Australia.

The New South Wales report has produced an excellent starting point. Changing the laws to allow such pharmaceutical therapy presents more of a challenge but is not an insurmountable obstacle. A civilised and compassionate country that supports evidence-based medicine and policy should acknowledge that medicinal cannabis is acceptably effective and safe and probably also cost-effective, especially when the cost of resource, use and improvement to the lives and functionality of patients and carers are considered.

There is certainly more to learn about medicinal cannabis but we know more than enough to act now. I will finish off with a quote from researcher Bradford Hill, who said:

All scientific knowledge is incomplete. That does not confer upon us the freedom to ignore the knowledge we already have or to postpone the action that it appears to demand.

Thank you for your time and the opportunity to speak.

- **CHAIR** Thank you. I appreciate that you are from the Huon Valley Council and represent that region but isn't it safe to say that your comments could be reflected by any area of the state?
- Mr REALE That could be, but Huon Valley has a recognised climate that suits the growing of medicinal cannabis and we already have facilities that are now vacant that used to grow mushrooms which could be utilised and converted at minimal cost, ready to go. We also have a trade training centre that has a horticultural department in it so people could be trained quite quickly to work at the facility.
- **CHAIR** Isn't it true though that before we get to the point of actually growing a product for use in the market there is more research that needs to be done? You may not be aware, but cannabis has a range of drugs in it -

Mr REALE - Yes, I am aware.

CHAIR - THC is one of them that has the hallucinogenic effects and then there is CBD and a range of others, up to 100, we are told, so it is not just a matter of saying here is a seed, let us grow it and that will do it, there is a bit more that needs to be done to ensure quality control. In the short term, unless it is just a trial rather than a full-scale operation it is unlikely that -

- **Mr REALE** We understand that the trials through the university will determine which type of cannabis would suit best to treat certain types of afflictions. We are also ready and willing to accept those trials and strongly support moving to growing those accepted products in the Huon Valley.
- Mr MULDER Are you talking about a medical trial or a growing trial or both?
- Mr REALE Both medicinal trials and the growing of the product.
- Mr MULDER I was wondering how long would a medicinal trial take.
- **Mr REALE** I am not sure how long the processing would take but I understand that two crops can be grown a year.
- **Mr MULDER** The growing trial is to work out which strains produce which particular substances and those sorts of things, and I would suggest that would last a while, but you also keep referring to a medical trial and the medical benefit to the community. A medical trial is a totally different thing. It is trialling which products have what effect on the community at large, so are you talking about that trial or are you talking about the growing trial?
- **Mr REALE** I guess both. First off you need to identify what strains are the most useful or the most needed in the community and once that is established then the growing trials could follow on from that.
- **Mr MULDER** You're not suggesting you have some expertise in the growing of cannabis?
- **Mr REALE** I am not suggesting that, I am suggesting that that expertise could be quickly developed.
- **Mr MULDER** You talk about the old mushroom factory site. Why do you say that is particularly well suited?
- **Mr REALE** The proponent looking at the trials has already been to inspect the site to see if it would be suitable. The owner of the site closed down the mushroom growing recently and much of the infrastructure is still in place and could be easily adapted for the growing of cannabis.
- **Mr MULDER** The fact is there are many similar sites that have grown a related plant, the tomato plant. There are lots of hothouses in other parts of the state that would also be particularly well suited, so what is special about the mushroom site?
- **Mr REALE** The mushroom site has propagation vents that would start off the seeds. There is also land available around the outside where they could be transferred to be grown outside. The location of the site is isolated so security could be applied quite easily. It has good water supply, good water pressure, so the irrigation is readily available.

- **Mr MULDER** You made reference several times to criminal proceedings in relational to people currently using it for medical purposes. Are you aware of any criminal proceedings against anyone?
- **Mr REALE** Not specifically, just generally. We recognise that security would have to be very controlled and the legislation around it.
- Mr MULDER Have you done any security assessments on the mushroom factory site?
- Mr REALE I believe an assessment has been done but I am not aware of the results.
- Mr MULDER Do you know who did it?
- **Mr REALE** No. It was done through the proponent.
- **Mrs HISCUTT** I presume you are addressing (5) of the terms of reference about the potential impact on agriculture and other sectors. As a council you are putting yourself forward as the best place to do it.
- Mr REALE Yes.
- **Mrs HISCUTT** So what you are putting forward is going to happen further down the track.
- Mr REALE Yes, and to put our support behind the trials.
- Mrs HISCUTT Good. I wanted to get it in context.
- Mr GAFFNEY I understand that councils have an advocacy role to boost the local economy. There are a lot of places in Tasmania that are similar to what you have just expressed. It is interesting that councils came straight out with policies and moving motions about the economic opportunity, but they don't do that for the poppy industry. Very few councils have a policy about that industry because that is between the proponent, the farmer and the industry, so councils don't have a role as such with that industry. Is it because this is an illegal substance that you think has opportunities for Tasmania. Whether it goes to Huon, Dorset or somewhere else is not the case in point, except from Huon Valley's viewpoint. More generally the council would be pleased if this trial could go ahead anywhere in the state.
- **Mr REALE** Yes, that is true. However, we would like to see the opportunities come to the Huon Valley because of other loss of industry in the area. We have infrastructure and facilities that are almost ready to go, and the proponent has expressed an interest in the Huon Valley due to its climate.
- **Mr GAFFNEY** So that would be a discussion between you and the proponent to attract them to the Huon Valley?
- **Mr REALE** Yes. They would be more specific discussions, however we would like to make known our general support because there is a long road ahead to legalise complete

- trails and then attract industry to a certain area. Getting the front foot forward, we want to make our position known.
- **Mr ARMSTRONG** The proponent had a look in the Huon and noted the infrastructure already there. Mike touched on poppy farming and that councils don't have a policy on it. I imagine the Huon Valley council has not had a policy on it because poppy farming is more broadacre, whereas Huon Valley is small titles.
- Mr REALE Poppies are already a well-established industry in the state.
- **Mr ARMSTRONG** Being a bit further south I don't know whether the population would be appropriate for them. Regarding the Glen Huon site, I was there when they inspected it. The proponent showed a real interest because the infrastructure was there, and for security reasons.
- **Mr ARMSTRONG** Security is a big one because there is a river adjacent to that site. It has good road access for cartage and freight. It is suitably located and is safe through being quite visible. The size of the site is ideal and the existing infrastructure is ideal, so it could be converted very economically to suit a growing trial.
- Mr ARMSTRONG Pumping rights as far as water was concerned?
- **Mr REALE** Yes, I believe there is a licence to pump water from the river, which is already existing.
- Mr ARMSTRONG As far as the infrastructure and everything that is why they -
- Mr REALE Yes, suitable.
- **Mr ARMSTRONG** It is close to Hobart and only an hour from the airport et cetera if they need to transport.
- Mr REALE The proponent expressed the view that the climate and infrastructure that is already there is ideal. There is also the fact that that site had a number of workers that have been made redundant through the closure. Many of those people probably have the skills to work at that site again, and they would be familiar with that site. Obviously they would need the appropriate safety screenings and other training to adapt their skills to suit.
- **CHAIR** So there needs to be a regulatory framework put in place around security because you cannot just say we will put security around and we will decide what is necessary. Clearly it is a bit more than that. Poppies have a security regime which is unlikely to be appropriate for a crop such as this. That takes a little time generally. Some members do not like any extra regulations at all, but this would have to be regulated. It does take a while for regulations to be drawn up and consulted properly. Admittedly we are still looking at a process that could take some time even for a trial, because security would still be an issue around a trial.

- **Mr REALE** I understand. This is not new to the world. There are already existing frameworks that maybe could be investigated and adapted. We believe that there would be a minimum requirement around security and would suggest and recommend that there is so that crops are safe and the community is safe.
- **CHAIR** Are you aware of the regulatory model in any other country that has a regulatory framework around the growing of medicinal cannabis?
- **Mr REALE** Only the Canadian example. I do not have that, but I am aware that they have a regulatory framework.
- **CHAIR** You do not know how that has been working?

Mr REALE - No.

CHAIR - As I understand it, when they initially established their medicinal cannabis legalisation for patient use, you were allowed to grow your own. I think that has recently changed, so perhaps their regulatory framework is quite new in that regard.

Mr REALE - I am not aware of it.

- **Mr ARMSTRONG** Troy Langman visited the Huon Valley and talked about the old mushroom site. He also touched on the outside part with the small acreage and how the land is fettered already with houses and everything for security. Did he touch on, beyond that, whether if it was grown outside that would be a bonus to the area?
- **Mr REALE** Yes, the visual security was a bonus. However, he did mention there would be fencing, security guards and probably cameras and other features that would help.

Mr ARMSTRONG - Because the small acreage, though, was going to benefit that?

Mr REALE - Yes.

CHAIR - Thanks very much for your time.

THE WITNESS WITHDREW

Mr Brenton West, Chief Executive Officer, Think South and Mr Martyn Evans, Mayor, Derwent Valley Council, Were Called, Made the Statutory Declaration and Were Examined.

- **CHAIR** Thank you, gentlemen. What you say in this committee is covered by parliamentary privilege but if you speak outside to the media after the hearing you are not covered. We received your submission which members have all read so I invite you to speak to the submission and then members will probably have some questions for you.
- Mr WEST My name is Brenton West, the CEO of Think South. Think South is a body that was previously known as the Southern Tasmanian Council Authority but we have a new trading or brand name, Think South, and we are the peak body that represents the 12 southern councils that make up over 50 per cent of the Tasmanian population. For other members from other jurisdictions the equivalent is the Cradle Coast Authority in the north-west and Northern Tasmanian Development in northern Tasmania.

We were created by the 12 southern councils to facilitate cooperative working partnerships and to improve the ability of councils to take joint action to address regional development issues and progress sustainable economic, environmental and social outcomes for southern Tasmania, its local communities and the state.

The board is made up of the mayors of the southern councils with the general managers attending our board meetings. Recently the Huon Valley and Derwent Valley councils passed motions and expressed interest in supporting a trial of medicinal cannabis in Tasmania. Following this, through our chair, Mayor Evans, who is the chair of our Economic Development Committee, a policy position supporting a trial of medicinal cannabis in southern Tasmania and a reduction of regulation for the industrial hemp industry was brought to our board.

This policy position was supported and passed unanimously at our meeting in August and I believe this is significant because, whilst there have been a number of councils from around the state, the majority of them rural councils, supporting a trial of medicinal cannabis, we think for the first time a number of large urban councils came on board and supported the trial unanimously.

Overall the board felt that, at a time when the Tasmanian economy remains soft, the economic impacts which ultimately could benefit the whole southern region were too good to ignore and the region should be embracing these opportunities, particularly in local communities that have been impacted by the downturn of the forest industry, as well as the obvious social and health benefits from the trial of medicinal cannabis.

Mr EVANS - Thank you, Brenton. It started off in regions and our region was very upfront with medicinal and industrial cannabis and took it straight away to our council meeting and firmed up a decision policy around that decision on medicinal and industrial hemp in the Derwent Valley. The Huon Valley Council borders us and has also been severely affected by the downturn in the forest industry.

We looked at economic growth in our areas and ways farmers could diversify their product and create employment for regional areas. Grassroots politics is local government and we are there to represent our people, the best interests of the community in ways to grow our community. We thought that medicinal and industrial hemp would be one of the ways that could grow our community and also Tasmania in a leading advantage not to miss the opportunity for our state to take the first progressive step. Other states are at the moment looking at medicinal and industrial hemp. We have heard the Prime Minister of late speak about medicinal and industrial hemp and even our federal member for Lyons is now pushing the barrow. He spoke with state ministers and wrote to the Prime Minister on the issues.

Farmers want to grow product. They need to opportunity to diversify what they do but also to create a larger economy. On a personal note, I think most people in this room would have been touched in some way by cancer or illnesses that cannabis may have a calming or relieving effect on and I think that is paramount. We need the opportunity to be able to give people relief and it is an opportunity sitting there for us, as Tasmania, to take the lead on.

- **CHAIR** There are a couple of points I would like to talk about. The terms of reference are fairly specific in this committee that we don't go confusing industrial hemp with medicinal cannabis here and one of the issues was that that was a bit of a smokescreen thrown up in the past. We need to focus on our terms of reference because there are suggestions that reduction of regulation for the hemp industry could cloud the issue so I would like to put that to the side and not deal with that because it is not part of the terms of reference to this committee. It seems from the information provided to the committee in submissions and in public discussion that there is a strong view of a need for a regulatory framework around the product to be grown if it is to be grown in Tasmania and administered to people as a medicinal product. How do you see the regulatory framework working from a council point of view?
- Mr WEST I think there is an opportunity initially before you establish that framework for councils to be engaged in the process about how it is going to work and whether they take some ownership. There are obviously some issues around planning and associated infrastructure that may need to be developed or built, so there are those regulatory issues. I suppose issues around health and safety would have to be led and driven by state Government through policy, but I certainly think that there is a role for local government to play consulting and working with government. Certainly you get better outcomes when you have all tiers of government working together to deliver results.
- **CHAIR** So what are the barriers as you see them from the local government level, particularly from the southern councils? Every council has their own bylaws, as you know they can be different and often competing, and it is okay to say the state Government and potentially the Federal Government need to sort out their backyards, but what about local government? Are there areas that would need to be addressed?
- **Mr WEST** It certainly was not raised by our board which had the mayors and GMs present when we put this policy position around supporting a trial of medicinal cannabis, and not just a trial to use the product, but a trial to grow the product, both elements. There were

certainly no issues raised at the board level around potential bylaws or issues that may impact that from taking place. As I said, I think there is an opportunity for councils to work with the state Government to address any unforeseen issues that may arise but there was certainly nothing indicated at our board that would be an issue at a local level to prevent this taking place.

- **CHAIR -** Clearly it would need to be moved from the schedule 9 classification it is sitting under at the moment to at least a schedule 8 before it could proceed, and then it is up to the Government to make some changes to our regulatory framework, but you are not aware of any local government barriers?
- **Mr WEST** No, and there is the Local Government Act which governs local government, and I don't think there is anything in there I have seen and certainly nothing was raised at our board meeting. If associated infrastructure needed to be built, that would obviously come through the planning scheme if there were planning issues and that is obviously an individual issue for each planning application, but certainly nothing was raised at our board meeting about any restrictions or by laws that may impede this from taking place.
- **Mrs HISCUTT** You say that your council is very supportive, which is good, but agricultural industries are usually a TFGA or a farmer purchaser/buyer-type thing. For councils to put their foot in here to say you are supporting it, other than planning for a hothouse, are you planning on anything else? Are you looking at security services and stuff like that?
- Mr WEST Most councils have their own security services for their municipal areas, and speaking with a proponent in the area who has a very strong interest in this field, in a secure location, he is aware of what he needs to do as a business to undertake a trial and he has come forward to us. The council has consultation with their stakeholders and ratepayers in their municipal areas on how to invest. We have spoken with farmers, with the Derwent Valley Council and with the TFGA's Jan Davis. Jan was initially taken back by the councils coming out in support because it is not really council's core business, but then she has seen it grow with support from us, which was great because it actually brought to the fore how important this is to farmers and regions.
- **Mrs HISCUTT** I suppose what I am asking here that as a council area you are happy to facilitate this happening, as opposed to providing security or things like that?
- **Mr WEST** That is right.
- **Mr EVANS** We are happy to facilitate and work in partnership where needs be. If it is building stronger regions and a stronger economy for our area or the state I think local government should be and that is where we are working at grassroots and in partnership with businesses.
- **Mr WEST** The whole purpose of our regional body being established seven or eight years ago was to take joint action to address regional development issues to deliver economic and social outcomes for our communities across the region. We think coming together as a group of 12 councils being engaged in a public policy debate adds weight and

support amongst the community so the Government knows there is that community backing and support for a trial of this nature to take place. There are certainly people around here who know the Local Government Act far better than me, but isn't one of the first objectives that local government is to look after their local community or something like that? We think that doing this and participating in the trial is delivering that outcome, so I suppose that is why we have weighed into the policy debate, as you might say.

- **CHAIR** I hear what you're saying and don't disagree, but this is a schedule 9 product or drug so why don't we focus on growing wasabi or saffron instead? Saffron is a really high-value, low-volume crop. We have lost an industry not just forestry, there have been others the mushroom factory has closed down, and saffron is not illegal.
- Mr WEST I don't think councils are specifically just focused on this one issue. In the Derwent Valley they had people there this week talking about an expansion of the dairy industry there. You have the irrigation schemes coming through the southern midlands and Sorell which are going to open up opportunities around a number of agricultural areas. We felt this issue was prevalent, it was in the local community and it was topical, so there was a debate and there are economic benefits but it was the board's view that what comes with those economic benefits are social and health benefits as well. As the mayor touched on in the opening statement, we think this addresses both of those and is something that as a group we can come together and support.
- Mr GAFFNEY You are right that there is nothing in the Local Government Act that would impede the development of this industry in the state. The only one that might is that you have to provide a safe community framework for any industry that comes into it, so I think you have done the right thing by getting out there. My only issue would be if it was a local government, whether it is the southern councils or the state, it is the local government association saying they support the development of this industry, or wasabi, or whatever, as long as it comes under the protection of a regulatory framework. I agree with what you are saying about advocating for your area but I don't see a role in this for local government other than making sure than making sure when the planning application comes in it ticks all the boxes for the building that will house the cannabis for the trial.
- **Mr WEST** You may be right, no direct involvement. We are certainly not the proponent or we the grower, as you say, but our job is to advocate and promote all those things and if that helps the community debate and show the Government that there is community support from our community leaders for something of this nature, we think that is an important role for us to play.
- **Mr GAFFNEY** The other role that is important for you guys to play, and you are doing it already, is to get to everybody in your community about this issue and debate. I think that is really important so they know the difference between medicinal cannabis and industrial hemp and that issue is separated. I agree with Ruth when to put that to the side because that is not the terms of reference.

- **Mr WEST** We certainly recognise those differences. I suppose we were just highlighting it from a process point of view. We went through a process where we brought them together for debate at the same time but we recognised this committee is just medicinal and so that is why we focused on that today. As a group we also support reduction in regulation for industrial hemp.
- **Mr GAFFNEY** Will your group take on board industrial hemp as a totally different push, because I think there is a definite role for you in that space although it is not to do with this committee?
- Mr EVANS We are definitely addressing that, as our council in the Derwent Valley would see the benefits in industrial hemp. I know this is about medicinal cannabis, but to answer the question, Mr Gaffney, I have already spoken with our federal members about the potential of the Derwent Valley, industrial hemp being a very close cousin to hops and how it can grow here and the change that is required to get that up and going. Eric Hutchinson has taken that forward to each state Health minister and the Prime Minister. COAG sits in January and they would like to bring it forward before that. Eric has definitely taken that on board.

We see the benefit of our agricultural land and it is a fantastic rotational crop that is safe but there are a lot of restrictions around that compared to the poppy, probably 15 more, about where you can grow it. It has to be so many kilometres from a road at the moment but the dangers associated with hemp are next to nil. We have taken that forward at the moment, and the downstream processing of the product.

- **Mr WEST** That is another key point. Whilst we are talking about growing and using it from a social and medical point of view, we think the downstream processing opportunities are also significant, turning either of those two products into the next stages. Value-adding and creating more jobs and industries for the state is really important as well.
- **Mr MULDER** You mentioned a couple of time your support for a trial. Are you talking about a growing trial or a medical trial in the community?
- **Mr EVANS** The STCA has put forward a growing trial in the southern Tasmanian area, but also a state-based medical trial. There are people out there who would be able to undertake that and we would need to have a strong partnership with UTAS with separation science on the product.

Our proponent in the Derwent Valley already does classification of different vines. He is abreast of that. There are so many strains of cannabis there that he will take that forward. He has already expressed an interest in a secured location for a trial in the Derwent Valley for medicinal cannabis.

Mr MULDER - You keep saying the Derwent Valley but I thought you were here as part of the economic committee of the Southern Councils. We are talking about a trial to grow it and a trial on the processing side of it. How would you support a medical trial in the community?

- **Mr EVANS** In the state or in the community itself?
- **Mr MULDER** In the community if what you are representing here is the southern councils.
- **Mr EVANS** Yes, over 50 per cent of the state's population. To make sure the product is safe to go out to consumer markets it needs to go through the Health department and the state Government as well.
- **Mr MULDER** We have a proponent who wants to grow it in the Huon Valley and one who wants to grow it in the Derwent Valley. Are you aware of any other proponents?
- **Mr EVANS** Not at the moment. They are both regional areas and they have both expressed an interest. We would like to see it in both areas.
- **CHAIR** I do not think we have any more questions. I did speak to you about potentially using up this time we have to do your Derwent Valley Council role. It would be helpful to do it now because we have competing interests with others, if that would be all right.
- Mr EVANS Thank you. Our councillors would have loved to have been here on Monday when we had the opportunity to present for the Derwent Valley. It is along the same lines as the STCA. We see the benefit for our economy and region. Our region, particularly in the Derwent Valley, has seen a major downturn in the forest industry. We are looking for other options and ways to work forward to create an economy, but also the health and social outcomes for people with illnesses as well as growing our economy.

Our council was one of the first to put the motions around the policy and take it forward. We have seen the benefits for health and our economy and how to grow it, linking it in with industrial hemp in the Derwent Valley. We saw it as a need and another way. It is not the only thing we are working on. As Brenton touched on earlier, we are talking about the growth and expansion of the dairy industry but also about sugar beet as an alternative to ethanol, so we are not one-way focused, we are seeing this as a very valuable product for the Derwent Valley and Tasmania. Our climate suits the growing and production of hops which, as I alluded to before, is a very close cousin to the hemp plant.

- **CHAIR** Did you do any specific and targeted community engagement in the Derwent Valley to seek feedback from the community? Are there people opposed to such a trial or people bending over backwards to see it happen?
- **Mr EVANS** The groundswell of support for both medicinal cannabis and industrial hemp is anything from 100 to one to 500 to on. It is an amazing thing because the benefit is in health but also in creating new business, economy and jobs. There have been a couple who have said they are opposing it but that was about how it was administered. They assumed it was going to be a social drug available for people.
- **CHAIR** They were thinking it was for recreational use?

- Mr EVANS Yes, and once it was explained that it wasn't for recreational use, it was for medicinal purposes which meant that a script and doctors were involved the people understood. We have done a lot of talking with our constituents and members of the public about the difference between industrial and medicinal as well, and that needed to be put out in the public so it has been our local paper and our newsletters over the last three months.
- CHAIR Was there a degree of confusion in the community about that?
- Mr EVANS There was some confusion initially where they were classifying industrial hemp the same as medicinal cannabis. Once we explained the difference between the two products and that one was for fibre and hopefully food and oil in future but also making paper, and the other was to treat illnesses, they understood. It is still topical today. I spend a lot of time in my community in our streets, our social clubs et cetera and I discuss any subject or topic they raise. I know all mayors get out and talk about what is in the community because they trust in their council to give them the information they require and they engage with us and I am very open about that.
- **CHAIR** It is good to hear you are not focusing entirely on this. Do you want to add anything else on behalf of the Derwent Valley Council?
- **Mr EVANS** We welcome this inquiry into medicinal cannabis and we would like to see it move forward in future and take advantage of our natural climate and clean, green image around production. Let's take this product and make a benefit for communities and economies, the Derwent Valley being but one.
- **Mr WEST** As I said in my opening remarks, it is significant that the 12 councils came together as a region quite quickly after this started to gain a bit of traction. Increasingly governments want to deal with regional bodies so any opportunity for a regional or state body to come together and support something shows not only community support but allows the Government to know there is support for it there and adds further weight to it.

The Huon and Derwent Valley councils have been the most proactive in encouraging those opportunities but there is no reason to suggest it couldn't be expanded around the rest of southern Tasmania where there are ideal growing sites, or even across the state where other councils have indicated their support. It is positive and encouraging that we have been able to come together as a body to see the social and economic benefits that could be delivered from a product such as this, but as the mayor said, there are other things we are focused on, not just this. We are not putting all out eggs in the one basket, so to speak, but we think this is an opportunity too good to miss out on and we think we should be trying to embrace that first-mover status on it.

CHAIR - It would be good if Tasmania could be the first mover.

Mr WEST - Yes.

CHAIR - All right, thank you, gentlemen. We appreciate your time.

THE WITNESSES WITHDREW.

DISCUSSION BY TELEPHONE WITH Dr ANDREW KATELARIS.

- **CHAIR** Thank you for making yourself available. This hearing is being recorded for *Hansard*. At this stage your evidence is not covered by parliamentary privilege because you are outside the state, so please keep that in mind.
- **Dr KATELARIS** I am Dr Andrew Katelaris. I was a registered medical practitioner up until 2005, at which time I was deregistered for prescribing and providing cannabis to sick patients. I have been researching the medical uses of cannabis since 1990, initially as an adjunct in pain control, because I found the opiate-based hospital medicines were not really the answer to chronic pain. We found by adding small amounts of cannabis in a synergistic way we could reduce the opioid need of patients.

In the last 12 months things have changed in the therapeutic area in that we received deliveries of high-CBD seeds. I grew a few pounds of this high-CBD variety last year and prepared an oil-infused mixture which I have used to treat 12 children with intractable epilepsy. Intractable epilepsy is by definition a child who has seizures despite maximal therapy, so I took 12 patients who had been failed by hospital care and sent home seizing on three or four separate potent medications. We had better than an 80 per cent response rate and some of the responders were even better than that and had become almost seizure-free after having many dozens of seizures each day. Not only did it control the seizures but uniformly the patients, parents and carers reported an increased alertness, an increased and better social interaction with eye contact and smiling, and an acceleration of verbal and motor skills. There have been dramatic improvements in the lifestyle of the children and parents.

CHAIR - Andrew, are you still deregistered?

- **Dr KATELARIS** Yes, and I have no interest in regaining registration. I am happy to practice as a cannabis-based Hippocratic physician because the allopathic system as it has developed the drug company Big Pharmaceutical-sponsored one has lost track. They have had many millions of dollars of research and have produced a suite of toxic drugs which are largely ineffective. Even when they are effective, the cost to the child's functioning means they generally completely obtunded, and they call that a success. If they have reduced the seizures by 50 per cent but reduced the kid's consciousness by more than that, it is hardly a therapeutic victory. I have no intention of returning to the allopathic group, I would prefer to do the work I am doing now.
- **CHAIR** One of the comments made to us through submissions and witnesses is that there is a bit of a dearth of research in recent times, particularly on the high-CBD product as opposed to the THC, which has the effects, as you are aware. Part of that problem -
- **Dr KATELARIS** No, I have to pull you up on that. I really should inform the committee of this. Over the last two or three decades the black-market breeders of recreational cannabis have almost completely removed the CBD content as a way of enhancing the psychotropic effect. There is a small amount of CBD in the mix so there can still be some recreational effect, but it is very much ameliorated the anxiety, paranoia, memory lapses, tachycardia all go away. By having a prohibition the black market forces have

bred a product that is more dangerous than it needs to be. Cannabis that includes CBD to THC is a [inaudible] cannabis. THC stimulates preferentially to the CB1 recepting brain, whereas cannabidiol leads to an up-regulation of amandamide, or the body's intrinsic cannabinoid, for a much more gentle and balanced effect.

- **CHAIR -** Thanks for that clarification. The point I was making was about the research that has been a bit lacking in some areas, mainly because it has been a prohibited substance.
- **Dr KATELARIS** It's more than that. I mean, there's been a vicious misinformation campaign to prove cannabis is dangerous. In the 1960s and 1970s you couldn't get funding for cannabis unless your project was aimed at proving how dangerous it was. It's a crim against humanity what we've done in retarding the therapeutic applications of cannabis because it has effects across a range of human ills that is just seen in any other therapeutic substance.
- **CHAIR** In order for you to be able to practise in a way that makes it an accessible product as opposed to a prohibited one at the moment, what needs to happen?
- Dr KATELARIS There is a number of things. In NSW this week I put in what we call a 23(4B) application. That is a chapter within our Drugs (Misuse and Trafficking) Act to allow the cultivation of an otherwise prohibited plant for scientific research. Now, whatever law changes there are, if I had my ideal wishes I would just remove all traces of prohibition and put it into the waste bin of history where it belongs with the Inquisition and other terrible things that have been done. My second and more practical wish is that we have a three-tier supply chain. The first one is if the patients or their proxies want to grow their own cannabis that should be without restriction. A company like Cavcan could have brought some really serious science to the cultivation, breeding and extraction of cannabis, and that was the next layer. If the allopathic doctors want TGA-approved medicine, they can wait in line for GW's pharmaceutical product and pay 10 times the price for it, but there needs to be three tiers. We can't have TGA-approved medicines to the exclusion of the other two because the data clearly indicates now that patients generally prefer herbal cannabis to pharmaceutically produced cannabis.

CHAIR - What is the difference between the two?

Dr KATELARIS - Most people aren't aware that synthetic THC passed all the American FDA tests back in 1974 and we have been able to prescribe synthetic THC since then. It's simply that the patients didn't like because it didn't give them much relief, and it turns out that was because they got the twist off the molecule, called the isomer form, wrong. I can't explain in detail the biochemistry because we don't really know but it appears [inaudible] entourage effect, which is a combination of two things, terpenes, the smelly parts of the cannabis, and the cannabinoids. The effect of those is greater than the sum of their parts; it has a synergism in its wholeness, so we want whole plant extracts rather than single therapeutic ones. I hope that's clear because that's a really important point. We don't want CBD. What we want is CBD-dominant whole cannabis extracts.

You have to look at things in perspective. There is a legion of suffering children. I concentrate on epilepsy because there's such an unmatched need and it's an area where

cannabis has such a positive effect and no discernible effects. In the international study that was done 27 out of 27 with Dravet syndrome, normally called catastrophic epilepsy in infancy, responded positively with a better than 80 per cent response and no toxicity, no side-effects. We have some shrieking halfwit called Bartone, the AMA president, saying, 'We can't give it to kids with epilepsy in case they get psychosis'. Firstly, he doesn't know what he's talking about and secondly - and this is a big thing I want the committee to reflect on - cannabidiol, CBD, at a dose of 1 500ml a day, treats paranoid schizophrenia as effectively as Risperidone but without side-effects. The ultimate irony of all this 'cannabis causes schizophrenia' hysteria is actually that cannabis cures schizophrenia better than the allopathic drugs. It might be hard to accept but it is published in the international literature.

CHAIR - When was that literature written?

Dr KATELARIS - It was either last year or the year before. I can certainly get it for you - it's not hard to get.

CHAIR - It would be helpful if you could provide that; you can email it to us.

Dr KATELARIS - Yes.

CHAIR - One of the comments has been that there is this lack of research but there seems to have been quite a degree of research. A previous witness earlier today suggested what we need is a proper and thorough literature review done to look all of this.

Dr KATELARIS - A literature review?

CHAIR - That is what was suggested to us.

Dr KATELARIS - Listen, you've got to be more practical. Kids are suffering here and now. We've developed a system using a simple sonicator and a food oil and we can made mediation in a parent's kitchen using herbal cannabis and no expensive equipment, which is much more effective than any drug currently on the market. There is a practical issue here. We have to start talking about compassionate access. The kids and even the adults who are suffering are not guinea pigs for some pharmaceutical model of how should be run. This is what I want people to understand. The kids we are dealing are having daily or hourly seizures and that is affecting their brains adversely. It's like the system is just kicking these kids in the head each day. That's why we get such an accelerated learning, once we control the seizures in a non-toxic way. We do not need a literature review. The first thing we need is an urgent amnesty to compassionate access. The doctors are deluding themselves. Ms Skinner here in New South Wales, who I am sure has no scientific or medical background, erroneously claimed in April that there was no need for medical cannabis because all conditions were adequately dealt with. That is so offensive when you are at the bedside of these kids seizing and you are powerless to act against it.

CHAIR - But isn't it true these children need a consistent, reliable product that is going to meet their medical needs every time? What we have currently is people using a variety of different cannabis oils that they are distrusting.

Dr KATELARIS - I take your point very much. There are a lot of charlatans and worse than that, there is a lot of these alcoholic tinctures floating around which have very low levels of medical drug in them but too much alcohol. I'm not in favour of that at all. But the way I'm doing it now is very simple because we don't know how tardy our political leaders are going to be on this subject and the parents simply can't wait and watch their children go backwards.

We're setting up community growers that can produce the herb as a reliable, dependable product. I only have occasional access to laboratory equipment. We have to send samples overseas to get them analysed because the labs here which have the expertise won't do it because we're not an official project. Even without that, with cannabis, because there is huge safety margin, it's very different from the allopathic drugs. We titrate to effect. For instance, I produce 500mls of cannabis-infused oil. Then for a new patient, they are given the dose to titrate. We will start them at 1ml three times a day and titrate to effect, so you add 1ml each day to a dose until you get the effect you're after. It really doesn't matter what the absolute milligram content is, but that's so easy to do.

Once we have access to analytical equipment, we standardise it. I standardise mine at 5mls per milligram at the moment but that has a width of 4-6 in accuracy because I don't have reliable lab testing, but it does not matter because the parent titrates. Unlike certain drugs that have a very narrow therapeutic range and toxicity if you go too high, cannabis has no top cut-off. There is no toxicity or capacity for harm. That is something the allopaths can't understand. It is a different type of what they call a botanical drug substance than all the drugs they are used to. If you give three or four times the usual dose of a lot of anti-epileptic drugs you can kill a child. Not so with cannabis. You could give them 300 times the dose with no problem. Also, the dose is not fixed. What I instruct the parents to do is to monitor their children because with these intractable epilepsies, they have their ups and down. If they have a febrile illness which lowers their seizure threshold, their dose needs to increase.

This is ignorant bleating from the AMA. I might be a bit pejorative in my terminology, but I am so over either Saxon Smith or Bartone spouting nonsense about which they know nothing to the detriment of the kids they should be looking after.

CHAIR - Whilst it remains a schedule 9 I assume you will face the challenge of getting any analysis of the product of the product you produce done in Australia. Is that true?

Dr KATELARIS - No, we established legal laboratory facilities back when we were doing the hemp project. There are laboratories that can do it if it is an official project. For instance, if there is an amnesty they can do it. The measuring is not that important because we have enough experience now that I can judge the quantity of resin in a bud by visual inspection and I know the efficiency of the extraction into oil. We can compute those within the parameters, it is not a big issue. I can operate without a laboratory. I don't really need it. Once the initial variety has been typed -

- **CHAIR -** If it was to become a widely used medication in a regulated framework so that not just children with epilepsy but potentially others could access it, you would need a framework around that to ensure that there was quality control, wouldn't you?
- **Dr KATELARIS** Oh, yes. The way I envisage it, if we are to be a proper progressive and compassionate country, we need urgent home-growing now to get things started, then you need companies like Cavcan and equivalents producing research and refining the method of extraction and packaging. It is not a sine qua non; you don't need it to go ahead. What we need now is urgent compassionate access and then we can go on. There is enough herbal regulation for purity and potency under existing legislation but you have to remove the criminal penalties.

The real problem I face constantly is because of the brainwashing - and I am using that word advisedly - of the prohibition since 1937, when you look at *Reefer Madness* and those propaganda films they're now laughable, but that's what has informed people's attitudes -'We have to control cannabis'. We don't have to control cannabis but we have to use it wisely, and that's easily done.

CHAIR - Do you only produce tincture?

Dr KATELARIS - No, I don't produce tincture. Tincture generally by definition is an alcohol extract. At the moment for the children I am using an oil-infused product. I use a food oil - generally a refined coconut oil, an MCT or an olive oil - and infuse the cannabinoids into that.

CHAIR - It is given orally?

Dr KATELARIS - Yes.

CHAIR - Is that the only method of administration?

- **Dr KATELARIS** You can individualise it because each kid is different. A lot of the children we were initially dealing with, because of the effects of the drugs they had been given, were on feeding tubes. They had lost the ability to swallow probably so we have to use it by the NG tube. Because we need a rescue medication we're developing a bucco-mucosal spray that can be used during a seizure to administer high doses and hopefully terminate the seizure. We've found in certain circumstances it can be used topically. There is no limit to how it can be used but it becomes an individual choice. In terms of epilepsy I'm very happy with the oil-infused product and I don't think we need to change that very much at this stage.
- **Mr FARRELL** Doctor, you touched on this earlier. We are hearing from the poppy growers in Tasmania and initially they did not have any opposition to it but now it seems that they have. I was reading through another piece of evidence we had from a Tasmanian doctor who said:

If the sufferer elects and finds that marijuana relieves their suffering, I don't believe that they should also have prescribed opiates. It has to be one or the other.

- **Dr KATELARIS** That is painful to hear, and I will tell you why. My earliest work back in the 1990s showed the fantastic synergy. The reason I got into therapeutic cannabis is because as a conventional doctor I was prescribing opiates and I saw the beginning of the epidemic we're now having with Oxycontin. These are very dangerous drugs killing thousands of people. What we have found in using cannabis in whatever form you elect is that you can reduce the need for opiates sometimes by more than 50 per cent and an aimed degree of analgesia. I don't who said that but it's clearly not someone who has any practical experience in cannabis therapeutics.
- Mr FARRELL Would this be an issue the poppy industry would be worried about maybe?
- **Dr KATELARIS** Why is the poppy industry commenting on the therapeutic uses of cannabis? I simply don't know where they're coming from.
- Mr FARRELL We haven't had a chance to ask them yet.
- **Dr KATELARIS** They have nothing to do with the issue, they're merely farmers growing a product.
- Mr FARRELL No, we hear from them later on.
- **Dr KATELARIS** Why do they have anything to do with it for a start?
- **Mr FARRELL** They sent us a submission and we need to listen to what they,
- **Dr KATELARIS** Okay, I would be fascinated to study their submission and see what their involvement or their imagined involvement would be in this.
- **CHAIR** It will be posted on our website so you will be able to read it.
- **Dr KATELARIS** I'll be interested to see what they have to say. We're selecting the bottom 10 per cent of people that the medical systems have dealt with unsuccessfully, starting with all of the terribly afflicted non-responders, it brings relief when nothing else does and then you have got the practitioners saying you can't prescribe narcotics and cannabinoids, that's very sad and misguided.
- **Mr MULDER** Doctor, just a couple of things. What is the THC good for and what is the CBD good for?
- **Dr KATELARIS** Firstly, I don't like to break them up into separate things. I talked before about the entourage effect and the sum being greater than the parts. However having said that, they both have therapeutic actions but are somewhat different. For instance, THC is probably a more potent acute analgesic. THC is a more effective antispasmodic, whereas CBD has unique anti-inflammatory and anti-anxiety properties, so you can start

to see where an excess of THC can bring on anxiety in an abuser, the CBD moderates that. They have overlapping and complementary effects. In the area of cancer treatment, in the tissue culture certainly it is very clear that the THC and CBD work synergistically together. What I am trying to push for in the first instance is to create a category called medical hemp. Just as we created a category called industrial hemp defined by a THC content of less than 0.5 per cent, I want a category called medical hemp so that anything with a predominance of CBD or CBD-THC which makes it unsuitable for recreational use is then called medical hemp and is not prohibited.

- **Mr MULDER** What sort of balances or mixtures would you say? I think you are suggesting that the two should be taken -
- **Dr KATELARIS** I can clarify that for you. Say, for instance, I have a kid with Dravet syndrome which is purely seizure-related. They will get a CBD-dominant medication at a ratio of about 10 to one. For a cerebral palsy victim with epilepsy plus a fair degree of spasticity, this is where you have to experiment between unity, one on one and even a slight predominance of THC. It depends on who you're dealing with. With the dystonias we're still working out the ideal ratio. It is early days for us. I mean, I have only really had access to CBD therapeutics for 12 months, so there's still a lot to be learned in the fine-tuning. Does that answer your question?
- **Mr MULDER** I haven't asked it yet. Are you gathering data of how these things work, what concentrations have what effects on the patients?
- **Dr KATELARIS** Yes, very much. I took 12 patients because we only had so much CBD-dominant cannabis and we started dosing them, we titrated the doses up and I have been following them for a number of reasons. There are different types of diagnoses behind the intractable epilepsy, so you might have Dravet syndrome or one of many other syndromes, so with the small numbers that I am able to work with, I am certainly recording full clinical details. I have an MD, a doctorate in medical research, I know what I'm doing.
- **Mr MULDER** I wasn't suggesting otherwise. I was asking was whether you were actually collecting this data and whether there is an intention one day to make that available to other people engaged in this field.
- **Dr KATELARIS** Ha! I scoff and I'll tell you why. Two weeks ago I went down to Melbourne for a Dravet family conference run by Professor Ingrid Scheffer who has won an Order of Australia for her work in epilepsy, and she would not even look at the data I took. I took data on a couple of patients she had seen the year before and given them both uniformly gloomy prognoses, saying they would probably die or be retarded, and she didn't even want to look at it. This is the sort of scientific editing and censorship we have to endure when we work with medical cannabis, especially when it has been so demonstrably better than the alternatives.
- **Mr MULDER** Are you aware of the European protocol on the signatories to that convention? I am just trying to pick up the name of it. I am referring to some notes from the Dutch Ministry for Wellbeing and Sport an interesting combination that talks

about the quality of medicinal cannabis, the contents of medicinal cannabis and the types of preparations available throughout Europe. I am not sure whether you are aware of that but it seems to go into some detail about the interaction with other drugs, pregnancy and breastfeeding, and it seems to be fairly supportive of it. I am just wondering whether you were familiar with some of those publications?

Dr KATELARIS - I know there have been attempts to produce protocols and things like that but, from my perspective, a parent growing a few plants in the backyard and having a \$100 sonicator can produce a medicine that will keep their child well. At some future stage we might have some sort of regulated industry but I'm trying to impress on this group and other groups I talk to that the needs are now. Children are seizing today, every hour, so there has to be a stepped introduction to this but starting with urgent compassionate access. That is so hard. Dozens of countries around the world and jurisdictions elsewhere have changed the law already, so why can't we catch up and give our suffering patients the same rights?

Mr MULDER - It was the Schengen Agreement, if that means anything to you.

Dr KATELARIS - I've heard of it but I didn't follow it.

- **Mr MULDER** They have some good notes and things which seem to go a little further than you in terms of the breakdown of the product and the fact that it is more than just the herbal combinations and they have it down to particular products. I was just wondering if you would like to look at those. Obviously you are not in a position to comment on something you have only just heard about.
- **Dr KATELARIS** I certainly will catch up with it in time. We can talk until the phones go dead but the important thing is how much material do we have to dispense? There is an urgent need. Do you hear what I'm saying? This not an isolated, ivory tower thing.
- **Mr MULDER** We got that bit, we were just trying to dig down about what medical evidence there might be to support the obvious effects of what there is and -
- **Dr KATELARIS** There is an enormous amount of literature. Alex Wodak said there is more supported literature for cannabis than just about any other drug in common use, and remember this was done in a climate where they were trying to find problems. Let's go into pharmaceuticals. In this country we still get halfwits, and I say that advisedly, but Tony is a halfwit when he is worrying about psychosis and the treatment of epilepsy.

Mr MULDER - My name is Tony, by the way.

Laughter.

Dr KATELARIS - Well, I don't care, tell him to wake up to himself and really start remembering why he did medicine in the first place, or have a talk to me and get some facts right. It is frustrating.

- **Mrs HISCUTT** I was just wondering how many people do you see this helping today as you speak, and if we do go ahead with this, how many people could you see it actually helping in the future? What are the numbers?
- **Dr KATELARIS** It really depends on your definitions because there will be people in different categories. In the urgent, needs-it-today or needs-it-last week category, the intractable epilepsies, the seriously narcotic-addicted chronic pain people who are on all sorts of polypharmaceuticals, they would be in the tens of thousands. To give you idea, Israel, a country of eight million people, has already enrolled 12 000 patients on their medical cannabis program. It depends on how broad your prescription is, too, because cannabis can replace a lot of drugs that we take for granted Valium, Hypnoval, Rohypnol all these sorts of things including the use of antispasmodics, so it depends how broadly it is used, but for urgent lifesaving things there would be tens of thousands and more if you are going to have a more liberal definition of what is needed. In terms of intractable epilepsy, 30 per cent of epileptics are controlled by allopathic medications and about 10 per cent of those are intractable, so that is thousands and thousands of people.
- **CHAIR** Andrew, do you have any experience with treating other medical conditions with the cannabis product as opposed to just epilepsy?
- **Dr KATELARIS** Yes. As I said, in the 1990s I started off with an adjunct in chronic pain control of various sorts, so chronic pain spasticity, spinal spasticity. We have been retarded, because there is a lot of conditions I would like to experiment with to see if we can verify the data that has come from other places, like Crohn's disease and inflammatory bowel disease, but there is such a shortage of the CBD cannabis that I have had to restrict it just to the little group with epilepsy.

The next exciting thing, and what I get a number of phone calls about, is the actual treatment of cancer. A number of people have put cannabis oil on their basal cell carcinomas and seen results fairly promptly. There are certainly many anecdotal reports that you can get an anti-cancer effect in the whole patient, and I have had direct experience of three people who have shown what appears to be a cannabis-related remission of cancer. That is something that we can investigate very urgently, but I have only had limited experience with that.

CHAIR - You said something about a section 24B application.

Dr KATELARIS - Section 23(4)(b).

CHAIR - Okay, sorry. What is that for?

Dr KATELARIS - It is an application to the Department of Health, basically. It is the Chief Health Officer here but Tasmania must have analogous literature, but whilst all these things are being worked out a 23(4)(b) licence application allows the cultivation of an otherwise prohibited plant for scientific research and that would also include administration. I put in my first 23(4)(b) in 1996 to get the hemp industry started in this country. In 2001 I got another 23(4)(b) to grow drug cannabis to work in cooperation with Southern Cross University to do stability testing, extraction methodology and things

like that. We were hoping to have an office of medical cannabis here but Bob Carr didn't deliver on his promises at that time and the licence was cancelled.

The beauty of it is with a 23(4)(b) there is no restrictions as to what you do with the product, it can be administered. If we are dealing with children with life-threatening epilepsy a 23(4)(b) will allow us to grow sufficient plant, extract sufficient medication and then treat a couple of hundred kids and get the sort of data that the AMA and the other naysayers are bleating we do not have.

- **CHAIR** Is it your intention to work with any other sort of recognised research body to try to give some credibility and weight to this?
- **Dr KATELARIS** I will work with anyone who has the wellbeing of children in their minds and hearts. I don't care who I work with as long as that is the criteria. Baird here says he has a working party to work out the details but I am pretty much in touch with the people who are well experienced and none of them have been called. You have the blind leading the lame over in Macquarie Street.
- **Mrs HISCUTT** Doctor, I was just wondering have you had any patients who this has not helped, any failures, so to speak?
- Dr KATELARIS Yes. I suppose when I said epilepsy, it was a bit broader than that. There are some categories that are not fully epileptic. We found that with a rare condition called infantile spasms the response is not quite as dramatic as it is with the major forms of tonic-clonic seizures and things like that. I wouldn't call them failures, it depends how you define it. When an allopath gets a 20 per cent-30 per cent response in seizures they call it a success. If we only get a 70 per cent reduction in seizures we call it a failure. It depends what you define as success and failure. I have never given it to anyone who hasn't in some way benefited, but the benefit can vary from dramatic to modest depending on the condition and so far infantile spasms appear to be somewhat less responsive. My particular view is that it is a dose response and we simply don't have enough CBD to push the dose titration up into an effective range, but I hope to modify that next year.
- **CHAIR** Does that comes down to plant breeding or other methods?
- **Dr KATELARIS** No, it comes out of plant growing. We have done our plant breeding. I have had to crawl around basements of patients' houses and things like that and grow these plants under lights and then send samples overseas to get them analysed. It is a pathetic way to operate, but we have done our plant breeding. We can always refine that, but the plant varieties we have now are fine and are working fantastically. Instead of 50 or 100 plants, we need to grow 50 000 or 100 000 plants that is simply the issue.

Why not? What is going to happen? If we get a few 23(4)(b)s in each state and start spreading it around, it's not a dangerous drug, it doesn't have toxicity, so we don't have to be worried about those sorts of things, especially with the CBD, we can get some meaningful data and in two or three years then you can have a regulatory system. It won't be possible to design the best regulatory system from the get-go, but that shouldn't

be used as a reason to leave people suffering ongoing damage while that is being worked out. Do you hear what I'm trying to put to you? We should have an urgent expansion of the informal supply while more formal systems are being put in place.

CHAIR - I hear what you are saying. Any other final comments you would like to make, Andrew?

Dr KATELARIS - There is one thing I would very much I would like to say. It is a disgrace to this country that in 2008 I put in an application A1039 to FSANZ to have hemp seed accepted as a human food here because that is essential for us to build a large and vibrant industry. We have been stuffed around by governments of both persuasions and we're still hoping now - there has been some welcoming noises coming from Abbott recently that it will pass in January. That is a six-year wait for an 18-month process, and that is a disgrace because they have retarded the hemp industries here, including Tasmania, where it could be a real boom to that state. You talk about comments. We are in total silence about Fukushima which is spewing radiation into the Pacific Ocean and is likely to cease the sea's supply of omega-3 and will collapse in our lifetimes and hemp seed is going to become an essential nutrient to keep the population well. We are the only country on earth that has not enacted that legislation and it is a disgrace, frankly. I understand Tasmania is supporting my application and I hope they carry the day in January.

CHAIR - So do we.

Dr KATELARIS - Good work. Doing something is better than doing nothing.

CHAIR - Thank you very much for your time, Andrew, we really appreciate it and the experience you provide to this debate.

Dr KATELARIS - Thanks very much for having me.

DISCUSSION CONCLUDED.

Dr Adrian Reynolds, Clinical Director, Alcohol and Drugs Service; Dr Max Sarma, Staff Specialist, Persistent Pain Service, Royal Hobart Hospital; Mr Peter Edwards, Acting assistant Commissioner, Planning and Development; Mrs Debra Salter, Manager, Executive Support and Secretariat, Department of Police and Emergency Management; Mrs Deidre Wilson, Director (Policy); Mrs Cheryl Hislop, Plant Industry Analyst, Department of Primary Industries, Water and Environment and Jim Galloway, Chief Pharmacist Were Called, Made the Statutory Declaration and Were Examined.

CHAIR - Thank you very much for coming. Everything is recorded for *Hansard* as a public hearing and the transcript will become part of the public record, published on our website. There is an opportunity to give in-camera evidence if the committee determines that is a reasonable request. Everything you say is protected by parliamentary privilege when you are before the committee but if you speak to the media afterwards that is not the case. You need to keep that in mind.

Dr SARMA - I am Max Sarma. I trained in medicine at Flinders University in South Australia and did my fellowship training in general practice in Tasmania. I have a clinical diploma in palliative medicines with the College of Physicians with Paul Dunn at the Whittle Ward. I did my fellowship in pain medicine through the Faculty of Pain Medicine of ANZCA and qualified in 2010.

I am speaking very much from a pain perspective but I have different perspective as well to bring to this. The quote that springs to mind around this is attributed to Mencken, which is to every complex situation there is usually an answer which is clear and simple and is usually only partially right or wrong. That illustrates a lot of what I think is happening here with the issues raised. I suspect, for the committee, I am going to raise more questions that I answer but that is perhaps as it should be as we work our way through this.

The Federal Drug Administration in the United States and federal regulations have effectively been bypassed in those countries by the states legislating, through popular demand, for medical cannabis, and in Australia we are seeing a similar approach to this issue. I note a press release from July this year from the Department of Health federally in Australia basically saying we have federal legislation but it is up to the states to enforce so in many ways that issue has been pushed out to the states again. What we have federally is a system of normal regulatory mechanisms established over 50 years to ensure a structured approach to the safety and efficacy of medications.

When you combine this medical or scientific issues mixed with political, legal and ideological concerns, it raises the question, if we are going to move to a different paradigm of approving the use of certain medications what is that paradigm going to be? How are we going to govern what is done, what medications, what systems will be in place and also, more to the point, what do you want from your medical practitioners? Do you want them to be using medications which have not been proven safe and effective through the normal regulatory mechanisms or do you want to have those mechanisms

bypassed to say a different standard will apply, a lesser standard will apply, in relation to those issues?

Stories of those who are suffering with individual conditions are important, there is no question about that. These stories will usually be about people in distress and will often be heart-wrenching. I see patients like this every single day and today is no exception, I can assure you. I have been seeing patients this morning. Healthcare providers do not get out of bed thinking, 'How can I stuff it up for the patient?', they get out of bed thinking, 'How can I do my best for the patient?'.

In terms of what I need to know to do my job, is not just having passion for what I do and compassion for people. Patients are central to what I do, but I also need to look at my professional knowledge and standards. In terms of professional standards, an issue which rises straightaway is liability, that in this confusing mix we are faced with, there is not only state and federal legislation to think about as it affects medical practitioners but also common law as well. If we use medications which have not been deemed by the normal regulatory mechanisms to be safe and effective, someone in the future could take a common law case of negligence against a medical practitioner when they suffer some adverse effect.

I am going straight prescribing as a frontline practitioner because this is what I have to think about. In the absence of a normal regulatory process I will be looking for guidance to my professional bodies and there is no position statement from the Australian Pain Society or the Faculty of Pain Medicine of ANZCA. FPM is starting to think about a position statement but it is not there yet. If I look overseas to the American Academy of Pain Medicine, the American Pain Society, the British Pain Society, I am not finding that guidance either. The only guidance in the British Pain Society I can find for common access is information which assigns cannabis as a herb which may or may not be effective in cancer pain. Similarly, there is a statement from the New South Wales Cancer Council which again provides very little additional guidance in this area.

What about making sure I have the right person, the right drug, the right formulation, the right route, the right time, the right way, which are the normal things that we think about in terms of prescribing, dispensing and administrating medications? What about the conditions and the components of that condition we are looking at? This is really important. From a pain perspective, bearing in mind that is my background in this area, we have known for over 10 years that if we put patients inside a functional MRI scanner where we can see different parts of the brain lighting up and give them a painful stimulus, it is not just the sensory discriminative components of the brain which light up but it is also the places in the brain where thinking, emotions and memory occur. When we are treating with the particular drug we are trying to find out what we are actually treating, are we treating the psychological components or the sensory discriminative components, and to what extent? We certainly know that the cannabinoid-1 receptors are all over the brain in all of these different areas, pretty much like the opiate receptors.

We also need to think about our treatment options and the risks and benefits of each of those individual options. It would certainly cross my mind as to what else there is that has been proven but has not been used in these particular cases. There is a lot of evidence in this area you can access. I am not going to go through every single paper or

review individually, if you would like me to provide it, I would be delighted, but just some of it would be the Australian National Council on Drugs, the *Journal of Pain Medicine*, the *New England Journal of Medicine*, the DHHS review on this particular topic conducted here, the *British Medical Journal*, the *Journal of Neuroscience* and the New South Wales committee submissions in this related area. There is a lot of information around but what I find invariably is that this is an emerging and promising therapy but we need more information, and that would summarise what each of these papers say.

If you look at the actual individual papers or the review papers, most of the studies have been conducted in small groups with a variety of different conditions; I think there are up to 19 different conditions where the medication has been used. The time periods are short, two to three weeks, so to try to extrapolate that to treatment that may go on for weeks, months or years is very difficult. The treatments are varied. There has been the botanic versus the derivatives, specifically being the Delta-9-THC and cannabidiol or the synthetic drugs dronabidol and nebilone, but of course that leaves aside the recreational lookalikes of the synthetic cannabinoids.

There has also been varied definitions of success. Is success every single person gets 30 per cent pain relief, for example, or is it one person in three, one person in five, one person in 10, one person in 20? There are the acute risks of memory, insulin, judgment, how it effects our emotions. If you look at the Netherlands as an example, and their Office of Medical Cannabis and instructions to medical practitioners, you will find a long list of acute risks of these medications, even though they have botanics which are essentially standardised. There are also the unknown long-term risks. I can tell you that I have seen patients in general practice where their psychosis, their schizophrenia, has been associated with cannabis use and it is not pretty. It is not pretty for the family, the patient or those around them, it is very challenging.

This is not something we can sweep under the carpet, it is a serious issue and not just on a personal level but a community level as well. What are the community aspects of this? We have learned from opioids that these drugs are not harm-free, the community risks are very substantial and we need to think about them. What about the options for those who have partaken in these different trials, what other options were the participants able to access, and did they access them? Were they given those treatments properly? All of these issues come up.

In summary, I would have to say that I have difficulty as things stand, as do many other medical practitioners I speak to in Tasmania, in prescribing without these issues being properly addressed. I will stop now and perhaps if you would like to ask questions around any of those areas or wherever else you would like to go I will be delighted to field questions. If I cannot answer them I will take them on notice and be happy to come back to the committee.

CHAIR - One thing you have said, Max, is that there is a lot of information out there but as far as being peer-reviewed well-conducted research that is not always the case with cited articles, but it seems that there is still work to be done. Isn't one of the challenges the fact that as a schedule 9 drug we can't really do the research under those frameworks and

get the results we need to progress this? You said it is a medication with promise perhaps. What do we need to do to even start that process?

Dr SARMA - Can you tell me the specific barrier you are referring to?

CHAIR - As a schedule 9 drug it is prohibited, as I understand. Maybe this is more a matter for Jim.

Dr SARMA - I think Jim can address that question of the barrier with drug trials, but perhaps I can deal with this issue upfront. There has certainly been criticism of the delay in getting drugs from inception out to market, there is no question about that, so that feeds into this area. With the naturally occurring components of cannabis obtaining patents over those is going to be an issue in itself. Clearly the major pharmaceutical companies, other than GW Pharma which makes Sativex, have not gone down this path, so there is a long lead time.

I am not sure if the system is perfect, that would be for others to say but from my perspective I have a single focus and that is what is safe and effective for my patients? That is right upfront every single time. Unless something has been proven to be safe and effective within the normal mechanisms we have of course I'm going to have some reticence about prescribing it. In terms of the barriers that arise in the trials that are permitted, perhaps Jim can speak to that.

CHAIR - I will come back to that point in a minute, if that is all right.

Mr GALLOWAY - There are provisions under section 55(2) for the minister to allow research with a prohibited substance at an exempted public institution, so the university could conduct research. The minister has a fairly wide discretion in the terms and conditions.

CHAIR - That is the state minister?

Mr GALLOWAY - Yes.

CHAIR - So we don't need legislative change?

Mr GALLOWAY - No, not for conducting the research. I think there is sufficient provision there already.

CHAIR - Research in terms of buying an appropriate product to then administer or just for the administration of a product that has already been prepared?

Mr GALLOWAY - I think of it as three elements. There is the growing, the processing and the medical trial. I guess the first two elements don't need to precede the actual clinical trial. There are provisions in Tasmania, as with poppies, to issue a licence for growing a prohibited plant and then you would proceed within the sphere of the university where section 55 would apply, so the minister would issue conditions around the processing of it and the conducting of the trial.

CHAIR - So at the moment there is no legislative barrier to the minister issuing a permit, or whatever is required, to conduct this sort of trial and research?

Mr GALLOWAY - No.

CHAIR - You are saying that your primary concern as a medical practitioner is to use drugs that are safe and effective. We all know there have been drugs used on patients that are not safe and effective, and you may well have prescribed some of them yourself over the years. Unfortunately, even with fairly rigorous processes being ticked off by every therapeutic body it has to go through, we still see some that have to be withdrawn from the market. Of course as a medical health professional that is of paramount importance. I think you mentioned earlier if we have a lesser standard in some areas. Where we have genuine cases of patients, children particularly, who have for years and years had a whole gamut of anticonvulsant medications without effect and there is anecdotal evidence that it isn't helping, do we need a less standardised approach, or is it not okay in your view to try an approach like that?

Dr SARMA - I will start at the end of your question and work backwards. I have done a lot of education sessions with GPs and this is relevant to what you are asking. In those sessions I have learned the hard way that when those cases are brought up in the middle of those education sessions, I now always ask to speak to the GP at the end. I am usually talking to the GP for half an hour to an hour and often late into the night after these evening sessions and the information I have or may not have received within two minutes within the education session is incomplete. There is so much information you need to acquire in order to know whether are not you are doing the right thing in a particular situation. There is no simple yes or no answer to your question, but I would say is at the end of the day I would be simply focused on what is safe and effective for the patient. That would firstly mean exploring all the contemporary medications available through the normal processes. I do not think those patients should be receiving any less before moving to experimental medications.

If the committee decides to recommend to move to an experimental trial we are going to have to address the issues which have been raised. For example, what is the specific condition? Let us take terminal care, for example, because this is one that was raised in New South Wales. What do we actually mean by terminal care? Is it an incurable patient? Is lower back pain incurable? There is a prevalence of lower back pain in the community, so is it an incurable disease? Will we allow cannabis for lower back pain? I think we first have to decide what is terminal. The second thing is whether it is for acute pain or chronic pain? Is it for chronic lung cancer pain or for cancer pain? Are we treating the psychological or psychiatric effects through that component or are we treating some other component, such as spasticity or whatever else it happens to be? There is no simple answer to your question. I am not trying to avoid your question, I am just saying this is complex and there are a lot of other issues. You are saying to me that if nothing else works, should we contemplate it? There are avenues to that through a properly a properly constituted medical trial.

CHAIR - Yes.

- **Dr SARMA** If I recall correctly you gave the example of a child who has tried everything and still has recurring seizures and there is significant suffering and distress around that. This is a heart-wrenching story and we are compassionate about that person, but there is a raft of other information we would need to know we are moving in the right direction. If everything else has been done the bottom line is, whether we can use it in a legitimate process in Tasmania? Could you provide that medication for that condition and particular target within a medical trial, which will add to our knowledge, rather than just being done without any purpose?
- **CHAIR** Wouldn't those considerations be taken, and I am sure they would, by any decision you are making, even regarding giving a young child an opioid? Wouldn't you go through that process is the best medication for this person, is it going to react with the psychological aspect of their condition or sensory aspect of their condition? It is not just this we are talking about, this is for any treatment you are proposing for a person.
- **Dr SARMA** All medications have risks and benefits and there are different options. We have over 20 years of experience with opioids which provides a lot of information regarding safety and efficacy and that is simply not the case with cannabis or cannabinoids.
- **CHAIR** So don't we need to get that?
- **Dr SARMA** We do, which why I suggested if you want to go down that path of experimental use that it is done within properly constituted medical trials, and there is a process for doing that within Australia at a national level which would appear has been bypassed at this stage.
- **CHAIR** Can we do it at a state level, though?
- **Dr SARMA** You would have to ask Jim that question.
- **CHAIR** And could it be done through the Menzies Centre, for example?
- **Dr SARMA** I am not sure. In regard to medical research, trials and what is and is not possible I think you would need to really get people with expertise in that area. That is not my area of expertise.
- **CHAIR** Someone from the Menzies Centre, for example, or Jim?
- **Mr GALLOWAY** Trials are possible with exempted public institutions. They are declared by the minister, people propose how they wish to run the trial and then the conditions are made so there is an enabling provision for the minister to make decisions on this.
- **CHAIR** Yes, but Max spoke overriding the federal process. Because we have state legislation that provides for that we are not actually overriding the federal process here, are we, in doing that?

Dr SARMA - My sense that if we are not going through the standard TGA process as we have for over 50 years we are effectively bypassing it and adopting a different system of accrediting medications for use.

CHAIR - Is the TGA doing work in this area?

Dr SARMA - Sativex, as you may be aware, is available as Nabiximols and is registered and I believe for Sativex, which comes originally from GW Pharma, they are into trials around pain at this point in time as well and I think Australia may be contributing to that.

Mr GAFFNEY - I have a question and perhaps if you could comment. People could say that the responsibility for the care of a child falls to the parents and not the system. We had a perfect case this morning where a parent has access to a remedy which protects her child and takes away that suffering and pain, so who are to say as a system that she shouldn't be able to access that? There was no suggestion this morning that she had not tried absolutely everything with competent professionals to try to alleviate the discomfort and stress of her child, and she even said that she became nurse, doctor, scientist and researcher even though she did not want to because the system does not deal with a specific case. What do you say to that parent who knows that when her child takes the medication there is social, physical and emotional development and the child leads a more normal life? How are we as a system to say, 'No, sorry, you can't do that.'? It is all right to say that we need 15-20 years for study and research, but if I was the parent of that child I would do all I could, regardless of the rules. It was suggested to another speaker that perhaps there could be an amnesty for those cases where it was working and relieving the child's suffering and there was improvement. She had tried everything else. How do you deal with that?

Dr SARMA - I think this is probably the nub of it, isn't it, in many ways and why it comes before this committee at this time. It is this intersection of medical and scientific issues with those often heartfelt individual concerns and the legal, political and social issues surrounding it. There is no simple answer. It has been vexing governments at different levels for a very long period of time and these ethical moral issues that you raise I think are incredibly important. If there was a simple answer it would have been solved by now but it has not been solved over a long period of time. I am not going to buy into a specific case because I do not know the details of it and I think that is fraught with difficulty and danger on many different levels.

In terms of what we say to the parent, what do we say with a whole range of different drugs? A parent comes in to me as a GP and says, 'I borrowed my next door neighbour's opiates and they seem to really help my child'. Do I turn a blind eye to that? The next patient might come in, as they have, and say, 'If I drink a slab of beer it helps my pain'. Do we say that is okay? I think we have to have some structural system around what we do in order to provide advice to individuals and we all do the best we can with the knowledge and standards that we have to respond to. I am not sure how well that addresses your question but it is the best answer I can give you at the present time.

Mr GALLOWAY - I do not want to comment on the case but we frame our thinking around quality, safety and efficacy. If you look at the Cochrane database, the internationally recognised database around medical care, in respect of investigating the efficacy of the

use of cannabinoids to reduce frequency in epilepsy it found that the reports investigated were of low quality and no reliable conclusions could be drawn regarding the efficacy of cannabinoids for the treatment of epilepsy. That is the best medical knowledge at this point in time.

- **CHAIR -** But if we stay at that point we would never do anything. We are talking about a child here. I know it is emotional but there is a child here on a 'do not resuscitate' order, and there are others in the same situation. As a health practitioner that is the absolute end of the road. At this stage we do not know it is effective because as Max said himself, there is research that still needs to be done. Are you suggesting that if we bypass the TGA or commonwealth process this way by doing state-based research to try to assist these people that is the wrong thing to do?
- Mr GALLOWAY I am not at all suggesting that research is not necessary. In advanced medical science we clearly do need research. If I could explain myself further, there are the three elements of efficacy, quality and safety. In respect of safety there is not sufficient evidence for any cannabidiol treatment for the long term. We are talking about the treatment of children as well as adults. A key thing to look at also is the Victorian report of the cannabis products being supplied there, where 40 per cent of them contained methylated spirits, alcohol and water.
- **CHAIR** That is the exact reason we need to have some proper quality control around this.
- **Mr GALLOWAY** That's right, and that is why I hark back to the principles of quality, safety and efficacy as a framework we need to operate in. I accept it really is problematic when you get down to the cases in deciding and despite several pilots run in Australia there has been no answer found to that.
- **CHAIR -** You are aware that trying to take a randomised controlled trial, a double-blind trial in particular, it is very difficult when you have a small cohort of patients with rare conditions who are very sick, to give some of those a placebo and hope they don't die. To get approval for something like that is not easy either and rightly so; it is like doing research on pregnant women where the ethics around that are very difficult and for good reason. How do we get to a point here?
- **Mr GALLOWAY -** The other thing I point you to is research currently going on in the US where they are fast-tracking the work on cannabidiols through GW Pharmaceuticals, looking at treatment of Dravet syndrome and another epileptic syndrome. Those drugs can be potentially made available through the special access scheme through the TGA, so there options that may present although I am not saying they are there now.
- **CHAIR** Can't we contribute to that through a medical trial here? You might be able to answer whether the Menzies Research Centre could be involved in something like that, maybe we need to talk to them, but is there a way we can contribute to that body of research?
- **Mr GALLOWAY** Yes, but there are a couple of things you have to deal with. You have to have the interest at the institution to conduct that research and you have to have medical investigators prepared to initiate that work. For instance, if you look at Dravet syndrome

it is a very rare condition so if you have a handful of people in Australia with that condition it is very difficult to conduct valid robust research.

CHAIR - That's my point. It is difficult but don't we need to do it?

Mr GALLOWAY - I would agree.

CHAIR - Can't we contribute?

- **Mr GALLOWAY** I guess when you get to the technical level of power that works it is difficult, given the numbers of patients involved.
- **CHAIR** But if we took the attitude that it is a bit difficult and we haven't got enough people to make a decent-sized cohort and stuff like that, we wouldn't have made many of the medical advances we have. Is that fair?
- **Dr SARMA** I think you are quite right. Some of these conditions are rare but a lot of the conditions which are being advocated for such as in cancer and chronic pain are not rare at all. Chronic non-cancer pain affects 20 per cent of the adult population in Australia. There is a huge cohort out there but the research has not been done.

I am going to give you a parallel to opioids In 1995 Stefan Schuh wrote a paper for the International Association for the Study of Pain Research on opioids. He said there is a lot of information around this but it is suffused with a lot of emotion and basically people grinding an axe with a particular ideological stance, there is not enough information to know how we prescribe it, who we prescribe to and how we do it. Here we are 20 years later and there is very little evidence around the use of opioids beyond three months.

CHAIR - Beyond three months - long-term use, you mean?

Dr SARMA - Yes. In other words, for chronic opioid therapy used beyond three months the evidence around its use is very limited indeed. I think any paper you care to read would say that. A useful one would be the American Pain Society and the American Academy of Pain Medicine from 2007 by a guy called Roger Chou.

There are certainly possibilities to do this research. A good question is why it is not being done. That would be the first thing but addressing the issues I raised in my opening statement, with appropriate structures within a properly constituted medical trial, even if you have small numbers in one state, if you have multiple states or multiple countries engaged in these trials, as they do for many medications, it becomes possible to get some meaningful information either on conditions from where you can extrapolate the findings to other conditions and it becomes worth a trial or directly to that particular condition.

- **Mr MULDER** Just on this point, are you still subscribing opioids even though we don't have this long-term evidence?
- **Dr SARMA** That is a perfect question because I think this is a real issue. Over time there has been a significant number of harms identified in the literature at a personal and a

community level associated with opioids. As a consequence of that there have been regulatory changes but in the professional bodies such as the Faculty of Pain Medicine, the American Pain Society and the British Pain Society there is now lots of guidance out there related to the use of opioids. Essentially what happens is that it becomes a trial of one, so you say, 'Have we tried all other therapies? Is it possible that we might want to use opioids?', and the general use of opioids would be as a component of a comprehensive program which includes not just biomedical interventions such as opioids but also psychological and social interventions.

In the Persistent Pain Service where I did my training and the patients I see nowadays there are so many other different issues going on and teasing it apart and finding that pathway between being compassionate and having professional standards we are doing our best to find that pathway. Most often what we would do if opioids are indicated and not contraindicated by a variety of aspects of the presentation is see if we could set some very specific goals related to pain relief and function and whether in a short period of time we actually get those particular goals achieved. If we do not get those goals achieved then really we should be taking those opioids off. What we have found is that in many cases the opioids don't come off, patients stay on them and increasingly we know that there are lots of side-effects of chronic opioid therapy that are really problematic for those individuals, not the least of which is addiction which is often heralded, but it can be down to the sex hormones which are interfered with, the dry mouth, the teeth falling out, the changes in the digestive system and so on.

CHAIR - But we keep giving it.

Dr SARMA - Exactly, but I think it is really problematic. There is plenty of evidence out there and the message I have got every single time I talk with other medical practitioners or any other people is that there is good guidance around this. We should be adhering to that good guidance.

Mr MULDER - How do we get the good guidance?

Dr SARMA - The good guidance was derived from evidence.

Mr MULDER - Why don't we walk down the opioids path for cannabinoids?

Dr SARMA - We have certainly learned from opioids and you could ask, quite rightly Tony, and I think this is why I keep raising opioids, does it provide an avenue of the risks which await us down the track with cannabinoids and the reasons for actually establishing good evidence for safety and efficacy to begin with? If you are going to bypass the normal regulatory mechanisms, what other structures will you put in place to address the issues which I raised in my opening address? Those are not issues that are going to go away and if they are not addressed we will end up with this dog's breakfast of prescribing for many different conditions in many different ways at many different times, and it will add, it will subtract from what we do.

CHAIR - Why hasn't this work been done on cannabinoids? You say there has been a multitude of work done on opiates and we still do not have the answers we really need in terms of long-term use. Even the US has said they are not going to use as much now.

They have reduced their poppy growers' contracts, basically, because they are going to stop using it as much. Obviously there is a message in that as well. Why hasn't the work been done on cannabinoids?

- **Dr SARMA** That is not a question I can answer for you.
- **CHAIR** Who do we have to ask that question to? Who would know the answer to that?
- **Mr GALLOWAY** I guess it comes out of the history of prohibition. If you look at GW Pharmaceuticals which came out in the late 1990s and was established about the time the House of Lords inquiry, they saw an opportunity for research and were encouraged by that inquiry and 15 or more years later we have a product on the market.
- CHAIR It just seems that cannabinoids have been demonised. People die from opiates. You probably have seen heroin addicts overdose and die. I have seen patients in hospital have too much opioids and we have to deal with that. It is not unknown. You know the risks associated with that, I do not have to tell you any of that, but we have still been 'happy' to use opioids in medical and community settings and do research. Here we have a product that is not dissimilar except it appears to have been demonised. Maybe Adrian might have an answer for that because he is working in that space. Perhaps we should go to Adrian.
- Dr SARMA Before we do, I think cannabinoids have been demonised at a political level under legislation and regulation for a start. If you want to know where they have been demonised, I suspect that is where it started. That would be number one. In terms of opioids, anybody who is informed properly about the risks and benefits of opioids will not be prescribing high doses, they will be prescribing low doses as part of a comprehensive program within that bio-psychosocial framework. You simply cannot get away from it because we know what lights up in the brain when you get pain and it is not just the sensory discriminative centres. There is reasonable evidence now that if you have doses over 100 milligrams of oral morphine equivalent each day, the risk of having an accidental overdose is significantly higher than if you are on a low dose of opioids each day. Clearly the risks and benefits are pretty well known around this and they are not being heeded.

It is a great question to ask why so many patients are on higher-dose opioids if that information is out there, and I can assure you I have been out there saying that message for an extended period and the message is out there. I think it is a great question you raise. Why haven't the pharmaceutical companies engaged in research around the long-term use of opioids? That is not a question I have a simple answer to. When you raise these questions in the cannabinoid space I can soon echo them out of the opioid space straight away and I do not have a simple answer to that.

- **CHAIR** But just because we have not done it well in one area does not mean we should not do it in another.
- **Mr GALLOWAY** There are structural problems because a pharmaceutical company will not see profits in this because they cannot patent these substances.

CHAIR - Shame, because it is a natural product.

Mr GALLOWAY - That's right.

CHAIR - We know what pharmaceutical companies are like. Adrian, I would like to hear your comments.

Dr REYNOLDS - Should I give a background to who I am?

CHAIR - Yes, perhaps so that members know your background.

Dr REYNOLDS - My name is Adrian Reynolds and I am the clinical director of the state's Alcohol and Drug Services. I have worked in the alcohol and drugs area for nearly 30 years. I have a Bachelor of Science with Honours from Monash University, a medical degree from Melbourne University, a Masters in public health from Griffith University and am a Fellow of the Chapter of Addiction Medicine. I am the president-elect of the Chapter of Addiction Medicine, Royal Australasian College of Physicians and currently policy lead for the College of Physicians in these matters. I have worked with six agencies of the United Nations in many countries of the world, including the World Health Organisation, so I have had exposure to these issues in many countries of the world in many political and critical contexts.

To come to your question, Ruth, I think the reason Max is presenting to a you a carefully constructed picture of why we are so keen to focus on quality, safety and efficacy is that a large chunk of our work and now our business seems to overlap significantly. Everyone references the comorbidity related to alcohol and drug use or substance use problems in mental health, but these days I get far more calls from general practitioners and other health practitioners about recurring chronic pain and addiction and mental health. The vast majority of those patients also have a mental health issue so it is very complex and difficult.

When people ask me what are the main drugs of concern, it is the legal drugs first, second, third and fourth, and then the illegal drugs, particularly in Tasmania, which demographically and in terms of drug use and health problems is quite distinct from the mainland in many ways. Many of the problems I see are in fact because are in fact because doctors and patients have acted with their hearts rather than paying attention to the evidence. In terms of cannabis, we want to do this properly and that means not unlearning the lessons of history and Max is describing to you the unfolding in history of the way we see and use opioids, which is changing quite dramatically. In the last decade the pain medicine area has altered dramatically in the way it is practising and is paying much more attention now to this added complexity of human distress and suffering.

We must be careful to think of population level over time as well as the individual person who is suffering from a medical condition. A view must be shaped by both considerations. I see significant problems related to cannabis and probably about a third of our presentations to the Alcohol and Drug Services per day are cannabis-related. Alcohol is the only drug in front of it in terms of numbers. I see problems from that end of the spectrum, the harms that can occur of a result of cannabis. That is not what you are here about today, you are looking at the possibility of carefully constructed evidence

around how we could use a particular cannabinoid for medical purposes in people who are not extensively responding to existing treatments.

- **CHAIR** So the referrals or communications you receive are from recreational users of an uncontrolled product.
- **Dr REYNOLDS** Correct, but then again many of the pharmaceuticals are in essence uncontrolled too. They are prescribed. We undertook a review of opioid prescribing, and you may know the report released by the minister of the previous government in 2012 called A Review of Opioid Prescribing in Tasmania a blueprint for the future. In that review undertaken by the National Drug and Alcohol Research Centre, we learned that up to 30 per cent of all morphine by milligrams that is prescribed in Tasmania is finding its way into injected drug use.

Doctors are variable in their knowledge and skills sets around this area. When I went through Melbourne University of Medicine I received one single lecture on alcoholism in fifth year and that was the sum total of my education and training. When I came to Tasmania, the medical course had something of that ilk, one or two lectures. Now I personally do between 40 and 50 hours of teaching through the year at the medical school about the range of substance-use problems and teaching clinical skills. So we are ramping that up. Tony asked about our still prescribing morphine, and we are but it is going change. We are at a tipping point. It has a role in medicine but his team are emphasising that this is a bio-psychosocial condition, that there is range of distress often intermingled in the presentation, and those presentations we see on the media. I am like Max, I am loath to say too much about individual cases because I know from repeated clinical experience that when you actually see the patient and their family and you learn about the full depth and breadth of what is going on, it starts to take quite a different shape oftentimes, so there is much more to the story than the media might want or be even reasonably able to present, or that I would want them to present. complex -

- **CHAIR** You are delving into very complex family structures at times and things that perhaps are not in the public interest.
- **Dr REYNOLDS** That is right, so you would not want the media to raise those issues. I am often in the background saying, 'Boy, there's a lot they don't know', and if they knew this their view might be a little bit different to the way they're presenting it. It is challenging for us as doctors. On the one hand we go into this profession because by nature we are compassionate, we care and are touched by people suffering and we want to prevent and address that but, on the other hand, there is increasing evidence around the processes in the brain. As Max has said, it is not just those receptive areas that light up when you are subjected to a pain stimulus but areas involved in cognitive and emotional areas light up and if people are distressed, have mental health or social problems and/or a history of substance use problems they often cope less well, less adaptably, to pain and other medical conditions.

We owe it to them to understand and treat the pathology. Does it matter if people get relief from the drug effects and it is actually something other than analgesia in the case of pain? I say it does matter because first, those patients often don't do well in the long term

if you're not treating the pathology. Second, you can actually be fuelling what we might loosely call maladaptive coping behaviours. Third, you are not giving yourself a chance to advance human knowledge in medicine on what works and what doesn't work and, fourth, a lot of these patients suffer serious adverse effects and I am being asked by the coroner and by a range of other parties to explain what is happening in medicine with prescribing that is perhaps, with what we know now, less than judicious.

That is a challenge for the medical profession but we are starting to meet it now and I see a dramatic momentum now in the medical fraternity. We had a meeting with GPs last week in the evening. As Max said, I do a lot of teaching too and there were over 30 GPs there and we talked about the evidence around the clinical utility risks and harms associated with benzodiazepines. If I'd had that discussion 10 years ago the doctors would have been saying, 'My patient benefits from these and they wouldn't misuse them and I'm going to keep prescribing them', but the conversation is shifting now.

We need to do good research. We mustn't take short cuts and get sidetracked by the fact that there are rare conditions that are a tragedy and medicine can't and doesn't solve every medical challenge at the moment but our challenge is to keep moving forward and right now with dwindling budgets we need to decide where our best investments are as well. That's the stark truth of it because increasingly we're not able to intervene with best practice and health budgets keep increasing and we're failing to act in the preventative space. We have known for nearly 50 years what to do around alcohol and tobacco and this responsibility rests with all three layers of government, all three levels, but we decline to act in that space and come to the experts to pull out the evidence and take notice of it. That is what concerns me.

CHAIR - I am on your side with that.

Dr REYNOLDS - I have a lot more but perhaps I will stop there and let us move on.

Mr MULDER - I think you mentioned the serious risks that have been identified by the Dutch Ministry of Health, Welfare and Sports in their report.

Dr SARMA - I said it's in their information to health professionals which is on their website.

Mr MULDER - It's not only on their website, Max, it's in my hands.

Dr SARMA - Fantastic.

Mr MULDER - I will just quote a section of the report for the record so we are sure we are talking about the same thing:

Physical side-effects of cannabis are tachycardia, orthostatic hypertension, headache, dizziness, sense of hot or cold in hands and feet, red burning eyes, muscle weaknesses, dry mouth.

And then in cannabis smokers:

After inhaling, irrigation of bronchial tubes. These effects are temporary and disappear a few hours after use. Long-term intensive use of cannabis is presumed to have effect on cognition but this is reversible. In some cases, cannabis can result in cannabis dependence and cannabis excess.

I am not sure what tachycardia or orthostatic hypertension are and no doubt you will inform me, but the rest of them do not seem to be terribly serious side-effects. Are we talking about different things here?

- **Dr SARMA** We are talking about the Netherlands, which has legalised medical cannabis and an office responsible for the supply of different products. If you look at the evidence from reliable journals such as the *New England Journal of Medicine*, *Pain Medicine* and so on about the adverse effects, first, there is a lack of knowledge of long-term harms which is a real issue; two, the issues related to psychosis and their long-term effects in relation to schizophrenia and psychosis are certainly at least emerging if not becoming more obvious. In terms of identifying those who are more at risk, we don't know. There are a range of side-effects that can occur and are not necessarily reversible. There is evidence in that space. I have read that website but I have to say I think there is a lot more to the story than is apparent there.
- **Mr MULDER** It is not a question of whether people are going to get access to this or not. The question is, under what conditions are they going to get access to it, because if we continue with our current stance we are going to have to go to the illegal market, who are going to use this anyway. This is the alcohol dilemma. Prohibition does not work.

As a medical practitioner, wouldn't you be much more concerned about people accessing a quality product that doesn't contain pesticides, heavy metals, contaminants and all sorts of other things? The Dutch have found in their university study, because they also have the coffee shops around the corner, although I don't think you would ever get a cup of coffee in one, that there is this public health issue about not only having to have all the marks on the road but trying some form of harm minimisation for those who are going to use it for other than recreational purposes.

- **Dr SARMA** Tony, that's a great question that goes right the heart of this issue. It comes back to some of the points I raised previously in that this is a vexed issue. There's obviously community use occurring right now, whether we like it or not.
- **Mr MULDER** It is a failure on the part of the police, who I see have arrived.
- **Dr SARMA** What we're trying to do is medicalise the issues in the absence of a proper paradigm in addressing the issues that come with medicalising the issue in terms of quality, safety and efficacy of the medication. Do you want your medical practitioners to operate in different paradigms of standards in different areas with different medications, or is this a community issue? Is this more of a general community recreational issue, if you want to put it like that? Do you, as political representatives, want to address that space? In New South Wales they did not want go into that space of recreational use and I certainly would not support that either, but which space do you take it into? At the moment the space which is being used is the medical space but without addressing all the issues which come with putting it into that space.

- Mr MULDER My question goes to the medical space. It is not about recreational use because you have other means, ineffective as they may be, of preventing that, but here we have people accessing a product but because of our public policy we have no assurance about the quality or the harms that can come from contaminants within that product. It is really a public health policy issue: do we go down the path of having a medical trial to get these long-term outcomes and maybe after 20 or 30 years we will be in the space we are with the opiates where we can find other means and refine our process. Hopefully it wouldn't take that long for the lights to come on if there are these longer-term effects.
- **Dr SARMA** We want to stay focused as a medical profession on quality, safety and efficacy, but we are also trying to move the information forward. This middle ground would appear to be a properly constituted, structured and run medical trial. If you are thinking practically about how you might want to move forward that is something which has potential and I think that has been flagged in different states as a potential way forward. Simply handing the issue over to the medical professional without getting into all of those issues I mentioned I think is fraught with great difficulty and undermining the very things you are after, which is quality, safety and efficacy.
- **Mr MULDER** This is where it comes down to my next point. Without a licensed and properly constructed approach to producing these materials of sufficient quality and standard we can't even conduct a trial because we don't have a reliable quality product to test.
- **Dr SARMA** That is one I will put to Jim because that is his specific area.
- **Mr GALLOWAY** There are mechanisms, as I said, with the university for running the trials, growing and processing.
- Mr MULDER So that would be a recommendation you would suggest is clearly made?
- **CHAIR** Do you have to leave us, Max?
- **Dr SARMA** I do. I really appreciate your time and I am very happy to address any more questions. If you have any specific questions related to the evidence you would like me to get information for you, subject to the minister's approval as I am a public servant, I am very happy to do that. Thank you.
- **CHAIR** Thank you. We will probably see you again.

Dr SARMA WITHDREW.

CHAIR - Jim, on the lines of a research framework around this, do you know what New South Wales and Victoria are proposing? We can also talk about other states that have indicated some desire or willingness to proceed into some sort of trial. What are they proposing and is it something Tasmania could link in with - although we would have to

- do our own framework probably so we have a commonality and consistent approach? As Tony was saying, the issue here is about getting a product that is consistent in its make-up so that if you are trying something you are trying the same thing all the time, as opposed to two different drugs potentially.
- **Mr GALLOWAY** I am not familiar with the details of what they are proposing interstate and in Victoria and New South Wales. Again, trials with prohibitive plants and substances are confined to an exempted public institution, so they could collaborate with trials interstate.
- **CHAIR** So there is the capacity to collaborate?
- **Mr GALLOWAY** Yes, but again, it's all at the discretion of the minister and his determination of conditions.
- **CHAIR** So the Tasmanian minister would need to collaborate with the New South Wales Health minister, for example.
- **Mr GALLOWAY** I think the first point of this, as with most of these trials, would be someone coming to the department and saying, 'Look, I've got this proposition,' and giving us the detail of it, then refining that and putting it to the minister 'Is this a reasonable thing? Does the minister support it?' We would proceed from there.
- **CHAIR** Do you have any views on the demonisation of cannabinoids in the past? The prohibition, as Max said -
- Mr GALLOWAY Do you mean in the medical sphere?
- **CHAIR** Yes, in the medical sphere, but I think the medical sphere is reacting to the political process and the regulatory framework put in place. Why has there not been a willingness to push for more research in these areas? We've done years of research into opioid use and it is still lacking in areas, particularly long-term use, so do you have an understanding or comment about why there has been a reluctance to proceed in the same way with cannabinoids?
- **Mr GALLOWAY** A few things occur to me. Firstly there's probably not a lot of money in it for Big Pharma because they can't patent these products. I believe the options were put around about research with the Tasman Health Cannabinoids proposal and there were no takers in the medical area for it. You have to find someone who has an interest in that area of research.
- **CHAIR -** We have not had them in front of us yet but I understood they had not put a formal proposal to the university.
- **Mr GALLOWAY** There were discussions going on and Professor Peterson was here when the NSW people visited and he saw options for a trial in nausea and vomiting involved with chemotherapy and that there was some potential for work there to analyse the space. You have to look at the practicalities of numbers and things but his indication to us at the time was that there hadn't been much interest in it. You have to have an interest from the

medical side in it. I will look at things I have thrown out which in the United States has not proved popular because it has a whole range of side-effects which you might accept with a THC product.

- **CHAIR -** Are you saying there appears to be no level of interest at UTAS and the Menzies Research Centre to undertake this research?
- **Mr GALLOWAY -** That was the initial indication to me in an informal discussion with Professor Peterson.
- **CHAIR** Adrian seems to have something to say on that.
- **Dr REYNOLDS** There was a grand rounds presentation at Royal Hobart Hospital last week and we have been doing our homework talking to a range of medical specialists. In this whole process of talk about a trial it wasn't clear to any of the medical profession in Tasmania that I have spoken to what this trial actually was about. Was it a trial to see whether we could grow a crop of cannabis or a trial of a specific extracted cannabinoid to treat one of the 25 or more medical conditions of which it is said there might be some benefit? It would be very unusual for a particular therapeutic agent to have such wideranging therapeutic efficacy given the widely ranging pathology associated with those 25-plus conditions; that is the first thing to say. One of the other doctors in the Grand Rounds said no-one had spoken to their knowledge about a trial of cannabis with the medical specialists associated with the PSB - in fact Jim had been involved but they didn't know that - no-one spoke to the addiction medicine specialists, no-one spoke to the persistent pain service, the acute pain service. We have had several meetings at the hospital around these issues with that group. The cardiologists, the neurologists, the emergency medicine physicians, the oncologists, the paediatricians, the gerontologists, the psychiatrists, the psychologists, the respiratory physicians, the infectious diseases physicians and the palliative care physicians and services - all of those specialties would have potential for involvement in either treatment or treatment of the unintended harms.
- **CHAIR -** So no-one has approached those people to your knowledge, but is there any interest amongst those groups?
- Dr REYNOLDS There doesn't appear to be, Ruth, and why might that be so? The evidence is not compelling at the moment. For example, there was a Cochrane collaboration last year that did not give us much joy. It concluded that there was no evidence for efficacy and safety of cannabis and cannabinoids in AIDS, because it was hoped there might be some benefits. In any case, modern antiretroviral agents prevent AIDS-related wasting so further trials are unlikely and the indication is in fact now obsolete. Recent publications report that cannabinoids have never been tested head-to-head with newer agents such as Ondansetron in the clinical management of nausea and vomiting associated with chemotherapy, and the Declaration of Helsinki told us that where there is a new molecule to be introduced for trial in clinical therapeutics it should be tested against all known other agencies that are the gold standard and the best available treatments. If we are going to do a trial I would imagine it would need to include head-to-head proper testing against, for example, Ondansetron.

CHAIR - Ondansetron has only been around for five or six years or more than that now.

Dr REYNOLDS - That's right. Time goes on but it's relatively recent. That is the sort of complexity there.

Then we look at the literature and Lisa Maher, who works at the National Drug and Alcohol Research Centre, said last year to the New South Wales parliamentary inquiry that she thought the best bets were control of nausea and vomiting from cancer chemotherapy; appetite stimulation in patients with HIV-AIDS-related wasting syndrome - Cochrane has said no to that one, it appears; the control of muscle spasticity from multiple sclerosis or spinal cord injury; and pain management for neuropathic pain and possibly for anti-inflammatory treatment. As Max presented to you, it appears that there is not consensus among the pain physicians around the country that this shows a lot of promise. I am sure they will not rule it out and perhaps in neuropathic pain there might be some benefits. Finally, she said bronchodilatation for asthma but of course we wouldn't want that to be smoked obviously. Then Farrell and Hall, who are both eminent scientists -

CHAIR - Are they? Not in this place, but anyway.

Laughter.

Dr REYNOLDS - Both Wayne Hall and Mike Farrell have peer-reviewed publications in the thousands. Mike Farrell is the director of our National Drug and Alcohol Research Centre and Wayne Hall is a previous director of that centre and now works in Queensland at the university and both have done extensive work for the World Health Organisation in the area of cannabis and health. Farrell and Hall said on the basis of existing evidence, medical world-renowned researchers have concluded that the number of medical conditions for which cannabis might be beneficial is small but Sativex or Nabiximols show most promise.

We heard there are trials of cannabidiol in children for epilepsy so we wait to see the results of that. That could be very vital and helpful.

Jan Copeland, the director of the National Cannabis Prevention and Information Centre and also a very eminent scientist on the international level, said the cannabinoid family of drugs is under-researched, which is your presentation. She said some have potential for medical application, which is your and our hope. She said the current state of evidence is not particularly strong and it is at best for two or three conditions and then only as a second line or adjunctive medication. She said cannabidiol or CPD and THCV or cannabidivarin are of most interest. Both are less potent agonists on the cannabinoid system, that drug effect that might worry us and be anxiogenic, causing anxiety or psychotic reaction. There is some evidence that cannabidiol might moderate the effects of THC. Mind you, it has been grown out of strains, we read as well, which is not good. She said those are both less potent so they might be a better bet for therapeutic purposes. She said potentials as anxiety, anti-psychotic and other indications for cannabidiol need to be researched, bearing in mind that THC might have the opposite effect.

Importantly, in her presentation to the New South Wales inquiry she said - and I concur with her - that among a group in palliative care not getting relief from mainstream

medications or even Sativex-type preparations, whose only psychological relief is because they strongly believe that smoking cannabis is the only thing that works for them, as a general course if cannabinoids are going to be made available they should be in pharmaceutical preparations where there is a known dose with no impurities. She is saying that out of compassion and as an exception - it might be going to your point, Tony - that maybe we have a gatekeeper role, though it would need to be a strict gatekeeper role. This is also part of the recommendations of the New South Wales group. Doctors, however, are not universally good at gatekeeper roles and nor are pharmacists around pharmaceutical drugs, unfortunately, so we would need to think about that very carefully, but like Max, I do not want to drop the ball on policy, safety and efficacy. I do not want to stop the frontiers of medicine going forward.

Who is interested? I cannot answer your question as to whether there might be interest but I think the idea of collaborating with international centres interstate probably is the best bet to get a critical mass base of researchers and maybe of trial participants, but what is it?

CHAIR - You'd still need a lead person here to run that, though.

Mr REYNOLDS - That may be the case, Ruth, but maybe not; Tasmania does not necessarily need to lead this. You are obviously keen, I gather, for that to occur, but there is no trial at the moment, as Jim has presented. As I understand it, the discussions broke down and there was not a demonstration of understanding of sites and what was required. Quite a considerable sum of money would need to be secured and I am not sure that we know where that is going to come from.

The other question is, once again, is this our best bet? Is this something where we should invest maybe many millions of dollars? To develop a new pharmaceutical, we read that it could be up to a billion dollars. That is designing a new molecule so that is not we are talking about here, but just the same, drug research is long-winded and extremely expensive if you are going to do it properly. I make the other very important point that even if we have a trial for one of the myriad of medical conditions for which we say there might be benefit, that does not make it medical evidence because in medicine we need to replicate the studies in different settings by different researchers because no research is perfect and they all have their methodological limitations inevitably and don't always adequately control for the three things we look to - chance, bias and confounding, so we need to be confident in our findings.

Even if we do this research, whatever is to be, it is not going to answer the question in dislocation and we must be clear about that. Any talk about a crop and an economic return to Tasmania seems to us very much cart before the horse. It could be years away and what is more, Mike Farrell said to me on the phone the other day when I rang him to check on a few things that the pathway for nabiximols was very lengthy and you can't say it is a money-spinner at this stage. As Jim said, these things have adverse side-effects and they don't jump out at patients necessarily.

In my space in addiction medicine, a significant component of who I see is the parent who is distressed for their child and who knows what is good for them. Generally parents do know when their child is sick, they're the best early litmus test that something

is wrong and a good health professional will listen to a mum who is concerned about their baby. Having said that, I know very well as a doctor that health literacy in this state and across our nation is not good and people often think they know what they know around health related issues and that belief system gets them into great difficulty and they often come to me and our services because they have decided to use prescription drugs or maybe other substances in a way they believe is okay and they will argue the toss with you but in fact it is harming them, if not killing them, so I have become very conservative and careful around those sorts of statements.

What was said in the media looks like a retreat from science. We are pretty disturbed that the way this was communicated to us was not directly by the legislators and those who are interested in this review, but it was through the media and through requests for briefings for the minister.

CHAIR - That's why we are doing this.

Mr REYNOLDS - I appreciate that, Ruth, but we believe there should have been some steps before this because you have put a lot of effort into this and this is serious business.

CHAIR - You are talking about the cost and obviously there is a need to have research funded and we know that is very expensive, but we also know the cost of caring for a child specialled in a paediatric ICU for a period and then on a ward for a number of years and long-term care, which is the nature of the condition some of these children have - it doesn't go away, you don't get over epilepsy like you get over the common cold - that is frighteningly expensive so when we are looking at cost-benefit analysis over time, you have to look at the long-term investment here.

Dr REYNOLDS - You have given me a segue into the most important message I wanted to leave with you today - thank you, Ruth. Yes, that is true, but from the evidence we have right now in the sum total - and it is a thin evidence overall, I think, unsatisfactory - we can't say we can hang our hat on medical cannabis for the purposes you are outlining at a population level over time. If the legislators are really serious, really genuine about reducing or preventing human suffering, which is what we're talking about, then I present they might now give very careful consideration to the upstream determinants of a lot of what is leading to this need or the quest for medical cannabis. People who drink too much who have falls and accidents and sustain a chronic injury that leads to chronic pain become dependent on opioids or maybe benzodiazepines and then smoke cannabis as well. They don't do too well on those prescription drugs when they won't engage in physiotherapy or cognitive behavioural therapy so they might say, 'I need medical cannabis for this condition.' What about the cancers and chemotherapy-induced nausea and vomiting? Many of those are caused by alcohol or tobacco or both combined and there is evidence that cannabis could also be carcinogenic. Of course it is often smoked with tobacco so it is difficult to differentiate which is contributing to which but we have evidence to suggest that cannabis itself, if smoked, could be carcinogenic.

That comes back to the question Max asked. We are hoping and we trust this not wedge politics because we think that is leading to legalisation. We are very concerned about that and that would take another very careful consideration.

CHAIR - Legalisation for recreational use?

Dr REYNOLDS - Yes.

CHAIR - That is clearly not part of the terms of reference for this committee.

Dr REYNOLDS - Correct, but we are concerned that many in the community who are engaging in this discussion would see this as a pathway. That is a separate scientific, social and ethical question for us as a society to answer and we would be ready to come and present on that if that was what people wanted to talk about. I do see there is real room for me to be cautious about this and I come back to the point that we have a distressed society that is suffering a great deal as a result of our policy and attention to the big-picture issues around alcohol and tobacco. In my view, if we are going to invest in research for public policy review, we should be looking at translational research as to why we are slow to translate what we know into policy and action.

CHAIR - So do we start telling patients, 'Sorry, you smoke so we're not going to treat you.'? That is almost where you are heading with those comments.

Dr REYNOLDS - Did I say that?

CHAIR - No, you did not.

Dr REYNOLDS - No. Say that again, Ruth, what are you suggesting?

CHAIR - The way you were heading down that pathway. I remember working in ICU many years ago with a youngish man - I don't think he was even 50 - he had a heart attack in bed and a physician came in and said, 'There's nothing else I can do for you. Unless you stop smoking you may as well leave now.'

Dr REYNOLDS - I apologise if I have miscommunicated because that is not my intention. My role is to treat people who suffer from substance abuse problems, Ruth, so like you I think that is a very disappointing response from a healthcare professional. When you think about it, when people become addicted to alcohol or tobacco they have lost their human agency or they are constrained, at least, in their capacity to make good decisions. The tobacco industry knows that when it captures our youth. That brings me to the other point. The big game-changer, the most important thing Australia could do now around preventing the uptake of smoking in youth and therefore reducing human suffering and a great deal of the need in future for something like medical cannabis, is to be the first country in the world to adopt a tobacco-free generation. You all know about that, I am sure. I think this is the game-changer for public health in Australia. There is increasing interest now in a dozen countries at least on this. This will happen. Some country will do it, the question is whether we go first.

CHAIR - That is going slightly off the track of where we are going.

Dr REYNOLDS - I think it is very relevant, Ruth.

CHAIR - It is linked, but there is no evidence I am aware of, and correct me if I am wrong here, that children with rare forms of epilepsy is a result of smoking.

Dr REYNOLDS - I am not suggesting that.

CHAIR - No. There are a group of other people out there who may or may not benefit from medicinal cannabis and, anecdotally, some appear to.

Dr REYNOLDS - Yes.

CHAIR - So shouldn't we have a duty to consider not just those potentially self-inflicted causes.

Dr REYNOLDS - Self-inflicted I do not think is the right term when it comes to alcohol and tobacco because it is the structural aspects of society and industry and how they behave and parents and peers that all influence our decisions. I think that is very simplistic view of human behaviour, if I may say so, Ruth, but don't get me wrong, I'm with you in that we need to look at the constellation of suffering and if we can find a way to do good research with epilepsy, absolutely we should do it. There are studies going on already, but I am making the point that as a doctor I concern myself not only about who is in front of me, the clinical cases in front of me, but I have to think about the population and the future and we have to balance that. We have investments across the spectrum, and I am concerned that we are not focused just on one end of the spectrum. That is actually quite a small part of population health, albeit not unimportant. Any medical condition is important for the individual and their families who suffer it, and there but for the grace of God go all of us, because tomorrow it could be us who has a rare condition and are suffering.

I understand that absolutely, but we do need to think more broadly about where we are going next in health care in Australia and I think this decision should be made in the context of those broader healthcare decisions, those tough decisions we are making now. We know that alcohol and drug services are very thin across the country, we know we have significant substance use problems and range of other problems and we have waitlists for people for surgery. We face all sorts of challenges and we have to be as smart as possible to look at where we can get the best returns on investment and prevent a great deal of this suffering and harm. That is the key thrust of my presentation.

CHAIR - We may invite you back at a later time, but thank you for your time. We might bring up the people from the Police department.

Dr REYNOLDS AND Mr GALLOWAY WITHDREW.

Mr PETER EDWARDS, ACTING ASSISTANT COMMISSIONER, PLANNING AND DEVELOPMENT; Mrs DEBRA SALTER, MANAGER, EXECUTIVE SUPPORT AND SECRETARIAT, DEPARTMENT OF POLICE AND EMERGENCY MANAGEMENT, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

Mr EDWARDS - I am the Acting Assistant Commissioner of Police. I would firstly like to thank the committee for inviting the Department of Police and Emergency Management to provide testimony to this inquiry hearing. Our department works with the departments of Health and Human Services and Primary Industries, Parks, Water and Environment in the development of the Government's submission to the inquiry.

The focus of the departments' contribution has been on ensuring that public safety remains the highest consideration in this process. Cannabis remains the commonly used illicit drug in Tasmania and a controlled substance under the Misuse of Drugs Act. Tasmania Police is committed and obligated to enforce the law in relation to the current legislation requirements. As such, any decision that supports the introduction of cannabis for medicinal purposes would require a regulated environment for growing, importing and access and administration of the drug by individuals.

The growing of high-THC cannabis would require a sound level of security in relation to the growing site, transport and processing facilities to prevent interference with crops and diversion into illicit drug markets. Importation requirements of cannabis or cannabis oil would also need to be considered if this is sanctioned as a method of supply.

The processes for individuals and their carers and families in legitimately accessing cannabis for medicinal purposes would need to be the subject of regulation to ensure clear identification of those accessing or using an illicit substance. In addition, broader public safety issues associated with persons of varying levels of participation and social activity who are using cannabis for medicinal purposes would need consideration. Notably, this includes the potential for individuals to be driving under the influence of cannabis.

The Department of Police and Emergency Management has a long history of involvement with the National Drug Strategy at the national and jurisdictional level and has worked in partnership with health and education authorities using a harmminimisation approach to reduce the supply, demand and harms associated with illicit drugs. Importantly, the department has worked collaboratively with the poppy and industrial hemp-growing industries and other government agencies to facilitate regulatory processes to support these industries and to ensure any potential for increased harms are addressed.

Tasmania Police remains the enforcement body to protect the community from the use of illicit drugs in this state. It is our view that the increased availability of any illicit substance must involve police in determining the regulatory environment in which this occurs. As you will have noted in the Government's submission, there are some established examples of medicinal cannabis models, particularly in Canada and the Netherlands, that are significantly regulated and support what are now mature industries. Tasmania Police advocates learning from these models should the medicinal use of cannabis be supported in this state.

Thank you again for providing the department the opportunity to ensure the community is well informed of regulatory and enforcement considerations of significance to the medicinal use of cannabis debate.

- **CHAIR** Just on the point you made about police being involved in developing a regulatory model and Canada, the Netherlands and others have already gone down that path, with your understanding of those jurisdictions, is there one the committee should particularly look at as a model that could be adopted or adapted here?
- **Mr EDWARDS** Both are referred to and my understanding is that the Canadian model is quite mature in that process.
- **CHAIR** I understand the Canadian model has changed from people being able to grow for their own personal use to a now more regulated framework. Is that the case in your understanding?
- Mr EDWARDS That is as I understand it.
- **CHAIR** How long ago did that change occur?
- Ms SALTER I am not entirely sure but I believe it has been getting on for a couple of years.
- **Mr MULDER** You mentioned in your introduction that a high level of security would be needed particularly around growing and importation and you were also suggesting that local processing occurs. Do you mean a higher level of security than we have for the poppy industry?
- **Mr EDWARDS** I think so, in that it is a different substance and is more easily used and diverted for criminal enterprise and, as I understand it, it would lead -
- **Mr MULDER** I'm not sure how jumping over a fence with a sign that says 'no poppies' and getting yourself loaded up with thebaine or something is necessarily more harmful than jumping over a fence and getting hold of some marijuana.
- **Mr EDWARDS** One of the things is that the illicit processing of poppies can be fatal and is fatal.
- **Mr MULDER** Which would suggest a higher level of security.
- **Mr EDWARDS** No, but the difference I am getting to is that there is some involved process around the poppies, whereas with cannabis, if you are growing it in fields, is very easy to process, use and market illegally.
- **Mr MULDER** I take you up on the poppy thing. You must have a fair amount of experience of people who have jumped a fence and gone through a long, slow boil to reduced the contents of the poppy to a gel which they store in their refrigerator and take quite readily. I'm just wondering why you get the idea that it's harder to jump over a fence and dry some leaves than it is to boil some poppy heads.
- **Mr EDWARDS** It's not harder to jump over a fence.

- **Mr MULDER** But the processing of the poppy heads doesn't require much more than the cannabis heads, does it?
- **Mr EDWARDS** I don't want to go into the details around that but there is not the degree of attraction, I suppose, for poppies as there is for cannabis.
- **Mr MULDER** So the risk we're talking about here is diversion of the illicit market.
- Mr EDWARDS Yes.
- **Mr MULDER** In that sense, I'm suggesting to you that the level of security around poppies is probably an appropriate benchmark for the level of security that should be around cannabis crops.
- **Mr EDWARDS** Poppies is an industry that has matured and the level of security developed over time. There was a significant learning process in that and the industry has taken on a significant amount in relation to the regulation and security arrangements.
- **Mr MULDER** It would also seem to me that cannabis perhaps in a illegally grown crop is probably more widespread in its illegal form and therefore there is no need to be jumping over fences to get the legally grown product. I am getting to the high level of security and why it should be higher for cannabis than poppies but I think you have addressed that.
- **Mrs SALTER** I would suggest that if you were growing a cannabis crop outside and it is easily accessible, it is a recognisable drug from the perspective of a member of the public looking to divert. With the poppies there is a degree of extra activity you need to go through in terms of getting some effect from the actual poppy capsule.
- Mr MULDER Boiling them instead of drying them.
- **Mrs SALTER** Yes. There have been some incidents of people being significantly affected from drinking poppy tea but not a huge amount.
- **CHAIR** Do you put that down to the fact that the majority of Tasmanians at least know that you can die from them?
- **Mrs SALTER** There is an absolute requirement from the industry perspective around putting out the warning signs of a particular cycle in the crop growing process et cetera, so yes.
- Mr MULDER It is about the impact of using the substance. In case of poppies, the impact would be much more severe, I would suggest. We are not talking about the risk of wholesale diversion, we are talking about picking a bit here and there. The security around the wholesale manufacturing is the fact that we are an island state and if you put a combine harvester through a crop of poppies or marijuana you would have difficulty exporting the bulk off the island, which is a different security regime. If you are talking people jumping the fence, I suggest the risk of jumping the fence and boiling some poppies is greater to an individual's wellbeing than jumping over the fence and drying

- some leaves and smoking some dope? Therefore, I suggest that poppies should require a higher level of security than cannabis.
- **Mr EDWARDS** You are quite right in relation to the results of access. It would be easy to jump the fence and our experience is that there are limited issues around the poppy industry. As you say, the cannabis industry at the moment is not overt.
- **Mr MULDER** The point of this is that when you are talking about security you need to talk about security against specific risks and we need to get those upfront before we can identify what level of security is appropriate.
- Mrs SALTER In the development of the models in Canada and the Netherlands, most of the growing models are in hydroponic internal situations because the economic return from growing in a paddock is not going to be anywhere near the target of being able to repeat a crop. I also suggest there probably would not be much of a desire to grow in an open paddock area. It would be more looking to make sure that you can maintain an ongoing crop that will get returns.
- **Mr MULDER** I was just exploring the level of risk that is required and making some comparisons. I think the bottom line of risk is likelihood and consequence and you have to put those two together to come up with an appropriate risk management model.
- **Mr EDWARDS** I guess what we are saying is we would simply suggest that we should be involved in those processes, as we have been with the poppy industry and the hemp industry.
- **Mr ARMSTRONG** Peter, you touched on the driving of vehicles. You test now for cannabis in drivers. If this happens could it work out that a driver would not be eligible to drive a motor vehicle?
- **Mr EDWARDS** That would certainly be a consideration that ought to be explored, I would suggest. That is a concern we would have because if people are under the influence of drugs they ought not be driving a motor vehicle. We would certainly suggest that that be a consideration in any legislative process undertaken.
- **Mr ARMSTRONG** I know it is not your area, but that would also be the same case with operating machinery. If a person was working on a building site and on cannabis for a back injury or whatever it may be and driving machinery, it would probably eliminate them from being able to operate machinery on a site.
- **Mr EDWARDS** Particularly in relation to the more recent work health and safety regulations regarding work sites, yes.
- **Mr ARMSTRONG** So those are things that need to be taken into account when we are dealing with this.
- Mr EDWARDS Absolutely. Yes.

- **CHAIR** Shouldn't that be the same with opioid use, because if they have chronic back pain to the extent that they're needing pain relief, whether it be cannabinoids or opioids, shouldn't the same rule apply?
- **Mr EDWARDS** You are not allowed to drive motor vehicles under the influence of any drug, basically.
- **CHAIR** So that does not change. If they are taking pain relief because they need it, that is the risk they run, regardless of whether it is cannabis or opioids.
- Mr ARMSTRONG It was just something I wanted to raise.
- **CHAIR** I am trying to clarify that it is the same principle.
- Mr EDWARDS Yes.
- **Mr GAFFNEY** Going back to Tony's point about the cannabis crop I take up your point that it is very much enclosed, protected and highly regulated, and putting any such drug into the community, people are not going to be jumping over the fence and grabbing some of it. It is going to be highly scrutinised, but surely that is a management issue for the company and the community to make sure they have all the strict protocols in place. I wouldn't say it would have any more impact on the police force unless there was a break-in or a crime, but usually the management would be up to the company.
- **Mr EDWARDS** It would be our argument that it should be regulated and that the industry and the company should have a significant responsibility. Invariably the police role, say with the poppies, is about reporting on people to see whether they are suitable to be involved in the industry, so that is the checking of their background, and the other end is about investigating breaches of the law in relation to it. They are the two real aspects and in the middle we would strongly argue for the industry and the people involved in it to regulate it and have that responsibility.
- **Mr GAFFNEY** Do you think there would be any concern that if we did regulate for a cannabis crop there would be widespread growth? Cannabis is very much in our community anyway, it's all over the place and not difficult to get. There is quite a bit around and it is used a lot. Because we are trialling something doesn't mean we would expect an explosion of cannabis users in Tasmania.
- Mrs SALTER We would be looking to ensure that within that process we would be very clear as to who was legitimately using cannabis for medical purposes and who was legitimately growing it, transporting it, storing it and undergoing some sort of manufacturing process with that.
- **Mr GAFFNEY** Going back to the driver who has cannabis in his system, if it is for medicinal purposes isn't it just like some people who may have epilepsy and have a restricted licence, those sort of things? They have a licence that says they are allowed to drive between this time and this time with a small amount of cannabis in their systems, for example.

- **Mr EDWARDS** All of those are considerations. As has been pointed out, it is unlawful to drive a motor vehicle under the adverse influence of a drug, whatever it is it could be a prescribed drug, so that applies. One of the considerations would be to at least consider that and whether you wanted to impose any greater regulation. That is really a matter for the legislators.
- Mrs HISCUTT I was a bit concerned that you see more, bigger and better controls over this crop as you would over an opium crop. You mentioned licensing at one stage. Poppy growers have a licence but the grower has the licence and he can put his worker in there to spray or whatever. Are you imagining that every person who walks into that shed is going to have to have a licence or a police check? What do you see as being extra over and above the normal controls that you would want to see?
- **Mr EDWARDS** Certainly we would be more disposed to hydroponic growing. If you are going to go down that path it is far easier to control than acres and acres of cannabis outdoors.
- Mrs HISCUTT I think at the minute we are talking sheds. It is medical, not industrial yet.
- **Mr EDWARDS** Yes. In that sort of confined space the expectation would be that the people who have access to it have appropriate background checks.
- Mrs HISCUTT Every worker?
- **Mr EDWARDS** Certainly that is what I expect we would propose because at the end of the day we want to avoid leakage or diversion of that product into the illicit market.
- Mrs HISCUTT Yes, but you can still put that into a poppy-growing scenario. Big growers would have three, four or even five different workers go into their crop but there is only the one licence and the one check. If anything goes wrong it is the responsibility of the person with the licence, so why do you see this needing tighter controls when the employer has people working for him who he knows and trusts obviously because he employed them? Are you still foreshadowing those workers needing the checks as well?
- **Mr EDWARDS** Yes, I am. That is really about providing the best protection for the community and avoiding leakage into the illicit market. What I have inferred is that cannabis is a far easier product to be in that market and return profits.
- **Mrs SALTER -** I am just getting some confirmation, but with the poppy industry there is a requirement for workers to be licensed.
- Mrs HISCUTT Each worker?
- Mrs SALTER Everybody associated with the process.
- Mrs HISCUTT How much is that? Do you know how much the cost of that is?
- **CHAIR** You can ask that when they come to the table. We will hold that one for now. Can I go down a slightly different path? There has been a lot of publicity of late, unless you

- have been under a rock somewhere, that people are stating publicly that they are using cannabis oil in Tasmania. What is the police approach to that?
- **Mr EDWARDS** The police approach is really about targeting those who distribute, manufacture and supply illicit drugs, whether it is cannabis or whatever. That is really our focus.
- **CHAIR** It is illegal to possess.
- **Mr EDWARDS** It is illegal to possess, but our focus is about attacking the supply and with the resources we have that is our focus. It does not mean that we do not apprehend, charge and prosecute people for having it in their possession, but we are not targeting them, we are targeting those people who are making profits out of the illegal trade.
- **CHAIR** In the last four or five years, have the police charged and prosecuted any individuals for possession of cannabis in broad terms?
- Mr EDWARDS Yes.
- **CHAIR** How many cases are we talking about?
- **Mr EDWARDS** I think in the last year about 2 500 people were charged with drug offences and about 400 were charged with serious drug offences.
- **Ms SALTER -** Serious drug offenders for cannabis and derivatives was 245 people in 2013-14; for cannabis plants, 22; and for other drug offences which sit outside that trafficking environment, for cannabis derivatives there were 131 and for cannabis plants there were 41.
- **CHAIR** The serious ones are not just possession of a small amount for personal use?
- Mr EDWARDS No, they are for selling or trafficking.
- **CHAIR** Okay, so where are the ones for possession for personal use in those figures?
- **Mr EDWARDS** We wouldn't have the details of personal use. You either possess a trafficable amount or a small amount. A lot of people will claim they have it for personal or medicinal use but as far as I am aware we do not actually break the figures down to that small amount of numbers. It is either low-level possession or it is selling.
- **CHAIR** In the cases of low-level possessions have there been cases where you have prosecuted someone for that where they have claimed it for medicinal purposes?
- **Mr EDWARDS** Anecdotally there would have been, because people do claim it is for medicinal purposes.
- **CHAIR** The answer is yes, so how many are we talking about here?

- Ms SALTER Can I say that in many cases when people are apprehended for the possession for small amounts of any illicit drug they can be diverted from the system. They can be provided through our illicit drug division initiative with a caution if it is a first-time offence for cannabis. They can also be referred under a diversion notice to authorities to receive some counselling assessment and possibly treatment for their drug use, and if they comply with that process they are not charged.
- **CHAIR -** For those who may have a diagnosed condition where they can perhaps claim, with or without evidence, a medical benefit of the cannabis being used, NSW is proposing a change to their legislation to enable the police not to even be required to proceed in any way. It is a compassionate type of approach. We had this discussion with the previous witnesses which I am sure you heard about what is a terminal illness. I think using that term is fraught but that is a separate issue. If the police are not proceeding with a charge of possession of small amounts when it is clear that a mother has a dose for her child that has low THC levels and the hallucinogenic effect is minimal, doesn't it undermine the whole law because aspects of it are being effectively ignored by our law enforcement officers? Should we look at an amendment to the legislation to require the police not to act in those cases?
- **Mr EDWARDS** I suppose there is a range of different ways you could approach that but from our perspective as guardians of the law our obligation is that if we find or come across it we would be obliged to seize it. That's how it stands at the moment.

CHAIR - That's what I'm saying.

- Mr EDWARDS Just listening to you raise a couple of issues, I suppose there are a couple of things. You could consider decriminalising very small amounts. That is one option. The other option, and how it might work I do not know but I heard it mentioned here today, was amnesty. From our perspective, all we are saying is if it is against the law our obligation is to act. I mentioned the national drug strategy about harm reduction and those things. Some of the examples where we have responded to those high-level policies is that we do not camp outside methadone programs to target people who may well be cannabis addicts or serious drug users to gain our intelligence that way, nor do we camp outside needle exchange programs. You might remember when these things were first introduced there was a very deliberate policy to ensure the police did not do that so that the harm reduction could have an effect. I think they are worthy of probably greater consideration if you were going down that path, but my official answer is if it is against the law as it stands at the moment we are obliged to do what the law says we should do.
- **CHAIR** Which is to prosecute the person and seize the product?
- **Mr EDWARDS** Certainly to seize them. The decision about prosecuting is case by case. We have the right to exercise discretion which we do, of course.
- **CHAIR** Doesn't it diminish the law by having to choose to ignore it in certain circumstances? Wouldn't it be better to have a law that reflected what is in practice when you have people having small amounts? Whether psychologically they need it or otherwise, they are finding it of benefit and to take away a supply of medication that

appears to be working very well to control a child's medical condition so they do not have any available for the next couple of days and the child becomes very ill, for example, isn't that a perverse and bad outcome?

- **Mr EDWARDS** We would prefer to be guided by the law.
- **Mr MULDER** Perhaps I can ask the same question in a more direct way. Has Tasmania Police ever targeted someone who is in the media and raided their house in order to obtain a product? We have heard from a number of them and we had one this morning who was very public about the fact that they are using an illegal product to gain a specific medical benefit. Has Tasmania Police ever targeted those sorts of cases?
- **Mr EDWARDS** To the best of my knowledge, no. It goes back to the point I was making before that our focus is around suppliers, manufacturers and distributors. In fact who are charged with possession are invariably caught up because we have come across it through some other intervention.
- **CHAIR** You mean they've done something else wrong as well.
- Mr GAFFNEY It is not a dilemma for the committee but we have had some individual submissions admitting that they use cannabis on a regular basis. We have some concerns about whether we put that on to our site because it could then be used by the police to say it this person has admitted to using it. Do the police have any comments about that issue? These people have in good faith sent their submissions to this committee and usually the Legislative Council would put all submissions on its website for open access, but we have some concerns about whether we should go down that track.
- **Mr EDWARDS** I think really that is a matter for you. I guess one of the qualifiers I would put is that sometimes we only charge people with very low levels of possession or use but we have searched them because we have intelligence that it is far more than personal possession and use but maybe at the time they were searched they did not have possession of the amount of drugs we had reason to believe they were going to be in possession of. As Mr Mulder indicated, people saying it is only for medicinal purposes is a standard defence and we will not always believe that is the case. I am throwing it back at you rather than providing advice.
- **Mr MULDER** You have already given the assurance that you do not camp outside methadone programs or needle exchanges, so you are not about to have your intelligence services trawl through the *Hansard* to find potential personal users.

Mr EDWARDS - Yes.

- **Mrs SALTER** It may be worthwhile for Jim to come back to the table to clarify about the opium poppies and the licensing requirements.
- **CHAIR** Yes. We will get the Prime Industries people here now and talk about the growing of it.

Mr EDWARDS AND Ms SALTER WITHDREW.

Ms DEIDRE WILSON, DIRECTOR (POLICY), AND Ms CHERYL HISLOP, PLANT INDUSTRY ANALYST, DEPARTMENT OF PRIMARY INDUSTRIES, WATER AND ENVIRONMENT, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

- **Ms WILSON** I am the director of AgriGrowth Tasmania in the Department of Primary Industries, Parks, Water and Environment. In terms of what we do, we deal with policy relating to agriculture.
- **Ms HISLOP** I am a policy analyst and have a fairly eclectic mix of things that I do and medical cannabis research is one of them at the moment.
- **CHAIR** Are you happy to speak to your aspect of the submission first before we take questions?
- **Ms HISLOP** Yes. Thank you very much to the committee for the opportunity to address you today. DPIPWE's contribution to the whole-of-government submission to the committee focus solely on the fifth term of reference, the potential impact of medical cannabis production on agricultural or other sectors within Tasmania.

As we noted in our response to this term of reference, new agricultural opportunities for Tasmania are always welcome. In our preliminary research into medical cannabis production and processing in other countries we noted that high-THC cannabis cultivars for medical uses are grown in high-security, intensive cropping environments such as greenhouses or decommissioned factories. In addition to the critical high-security factors for such a crop, intensive indoor growing also enables year-round staggered production in a series of grow rooms that are environmentally controlled and manipulated. We have found no evidence of illicit broadacre production of medical cannabis in any country that allows it to be grown for medical use.

DPIPWE continues to be proactive regarding industrial hemp production in Tasmania and is well aware of the need to treat industrial hemp and medical cannabis production as two distinct and discrete entities. DPIPWE is also mindful of the concerns of Poppy Growers Tasmania and its view that medical cannabis production would need to progress very carefully so as not to compromise the outstanding reputation of the state's poppy industry.

In preparation for the committee hearing I prepared a succinct case study on the Canadian medical cannabis industry. I can table this now if the committee wishes to examine it or, alternatively, I can the opportunity to speak to it. It is quite brief.

I did hear some questions earlier about when Canada tightened up its laws and it was only a couple of years ago, as I am aware. Previously, approved individuals were able to grow to a maximum of two plants or, alternatively, purchase from others approved to grow for them.

The opinion pieces I have read indicate that the Canadian government saw a missed opportunity for revenue-raising in this area so they tightened up the regulatory environment significantly. However, it has not put people off because more than 850 companies have now applied to Health Canada for licences to grow medical cannabis and as of April this year there were 13 authorised producers. Most of these 13 are or intend to be publicly listed, with investors anticipating significant market growth and profits. Medical cannabis is considered a high-risk, high-return capital venture in Canada. Health Canada estimates that within a decade the medical cannabis market will grow to more than 400 000 registered patients, generating annual sales of some \$1.3 billion. I hasten to add, however, that Canada's licensed producers sell medicinal THC and cannabinoid products in a number of forms, primarily in vaporisers, tinctures, dried buds for smoking - it is allowed to be smoked there - and capsules containing the active ingredients. It is also sold to a much broader market to treat a broad range of illnesses and conditions from non-life-threatening ones such as migraine, arthritis and insomnia to life-threatening and end-of-life conditions. This approach has opened up the market to a significantly broad range of registered patients.

All producers in Canada now must comply with the Marijuana for Medical Purposes Regulations, or MMPR, which sets out amongst other things incredibly strict security protocols. These protocols essentially dictate how medical cannabis can be grown. It requires 24/7 visual monitoring by devices which must be manned by personnel at all times and the site must be secured by an intrusion detection system operating 24/7 on fencing and doors, et cetera. There is strictly limited access to the site, allowing only authorised personnel with access security codes; indeed, some companies are even using biometric scanning security advisors. All those entering and leaving must be recorded in a log and the site must have physical barriers that prevent access. Most Canadian companies as well tend to grow, process and manufacture in the one location.

According to Health Canada guidance documents, all personnel involved in medical cannabis production and security et cetera must have background checks for criminal activity, must specify their planned activities with marijuana, identify the maximum amount to be produced, provide precise site information, a comprehensive business plan, building ownership, safety and security details. One Canadian company, for example, is spending \$3 million on security alone to comply with the MMPR requirements, which includes installing double rings of 12-foot high fences topped with razor wire. Another Canadian company, Tweed, uses digital and biometric security.

Medical cannabis facilities require all who enter to be scrupulously clean to prevent the introduction of impurities which might compromise the purity and integrity of the product. Sterility is paramount as many medical cannabis users are immuno-deficient. Staff must shower before entering the building and wear coats, hairnets, gloves and shoe coverings. Products are exposed to gamma radiation to eliminate any unwanted organisms like fungi and bacteria. Gamma radiation is required to meet contaminant levels that are safe for inhaled medicines.

Health Canada also requires medical cannabis applicants to notify municipalities of their intentions to grow, as people have the right to appeal against the proposed location. They must consult local police and fire officials, install noise and odour controls and

include a 70-metre buffer zone around the facility if it operates near residential zones, daycare centres, churches, schools, playgrounds and the like.

CHAIR - Seriously OTT.

Ms HISLOP - I think they certainly erred on the side of caution.

- **Mr MULDER** By way of explanation just drawing on my evidence, fire is usually associated with security because if you just left it to security you would lock the place down and you would end up with people not being able to escape, hence fire doors are a security requirement and that is what you consult the fire department for. Not to protect the crop, but to protect the lives of people escaping the fire.
- **Ms HISLOP** I understand, too, that quite a strong smell can be emitted from the production rooms and there is noise of air recycling, et cetera, so there are those kinds of things that are looked into.

Production locations in Canada include a retrofitted 160 000 square foot Hershey's chocolate factory in Ontario which is being turned into a state-of-the-art medical cannabis production facility that will eventually grow 50 000 plants under grow lights with an electricity bill of around \$100 000 per month. The company Tweed currently employs 40 people but will need more when in full production. It aims to have up to 30 grow rooms to handle different growth stages with each grow room harvested every 10 weeks or so and yielding about \$5 million in product annually per grow room.

Another company, Canadiana, intends to turn a 25 000 square foot indoor soccer stadium into a medical cannabis production facility. Parkland Farms in Niagara has a 350 000 square foot facility currently growing 4 000 plants in a small corner but at full capacity it will be growing up 45 million grams per year of medical cannabis, that is how it is addressed in Canada, and employing between 50 and 60 people at peak production. So that gives you an idea of the Canadian market, which was referred to earlier as really mature.

- **CHAIR** So they've gone from letting me grow my own in the backyard to this. What disaster occurred there that required such a change except for the government wanting to making money out of it?
- **Ms HISLOP** I could find no evidence of anything terrible happening apart from the government feeling it was losing control over revenue.
- **Ms WILSON** We can't say what the policy makers were doing, we haven't looked at their second reading speech, but it may well come down to the fact that if you are going to supply a product as medicinal cannabis some of these measures would ensure -
- **CHAIR** A pharmaceutical requirement?
- **Ms WILSON -** We are speculating and it is something we will continue to look at in terms of our research. When we looked at this we were looking primarily at the industry. The

question that has been asked in the community is whether this is an opportunity for a broadacre crop, so we were looking at how a jurisdiction currently grows a crop.

CHAIR - Yes, fair enough.

- **Ms WILSON** We were looking primarily at the growing conditions and some of the regulatory reforms that sit around that in what could be described as a mature jurisdiction.
- **CHAIR** What you are saying is that, with the Canadian experience at least, it is unlikely to be a broadacre crop, it is likely to be a crop grown in a very controlled and contained environment, generally inside a building.
- Ms WILSON Yes, for reasons of not just security but integrity of the product.
- **CHAIR** They are doing their downstream-processing on site.
- **Ms WILSON -** All of them in Canada do the whole lot on site, which is probably another reason for the very high security because the end product would be pretty powerful.

CHAIR - And valuable.

Ms HISLOP - Yes and very high value.

- **Mrs HISCUTT** That is going to make it very expensive for a trial. Is there any way, looking at the terms of reference, that we could import the product from another state to do the trials here?
- **Ms HISLOP -** It depends what we are trialling. I still do not understand whether the trial is for growing it here or -

Mrs HISCUTT - Probably the both.

- Ms WILSON We may have to get our Health colleagues back to answer that question because we are not the regulators. Remembering that we are talking about Canada as a mature commercial jurisdiction, whereas my understanding from the evidence this morning and what has been put in our whole-of-government submission was about the concept of medical trials. This is at a scale that is different, but as I say I think we should bring back our Health colleagues and propose that you perhaps ask them about that issue.
- **Mr MULDER** Given the fatal risks associated with poppy crop interferences, why are we not applying the mature Canadian standard to our poppy crops? I must say it did seem a little over the top in terms of security arrangements for a product that in the end is really lethal.
- **Ms HISLOP** You would need to direct that to our Health colleagues well, they are the regulators.

- **Ms WILSON** The poppy industry is highly regulated and has an internationally recognised reputation as a safe and secure supplier.
- **Mr MULDER** I was just drawing the comparison between the two.
- Ms WILSON I appreciate that.
- **Mr MULDER** I am probably suggesting that maybe we think the poppy industry is not mature yet.
- **CHAIR** The poppy processing, where they actually process the product, is much more secure than the paddocks.
- Ms WILSON That is my point. It is a highly regulated industry in terms of processing.
- CHAIR In your written submission your closing comment on terms of reference 5 is that the Tasmanian Government is also aware of the views of Poppy Growers Tasmania regarding the production of medical cannabis in the state and the need to be mindful of any potential impacts on the international reputation of the poppy industry in this state. What are those risks, particularly if there were low-THC crops being grown? We heard earlier that the recreational users breed crops with high THC levels because that is what they are looking for whereas in its more natural form or in terms of medicinal use, in most applications, whether it is proven effective or otherwise, it seems to be the case that CBD is the central aspect of the plant that has the medicinal benefit without the hallucinogenic and psychoactive effects. What do you see the potential impacts on the international reputation of the poppy industry to be?
- **Ms WILSON** Our evidence is based on information provided by Poppy Growers Tasmania and I understand they will be appearing tomorrow so I suggest they are best placed to do that. What we are saying as DPIPWE is that Poppy Growers Tasmania have indicated to us that they are mindful of their international reputation and are proposing careful consideration of this matter in terms of trials and expansion. That is what we wanted to reflect.
- **CHAIR** I find it a bit disingenuous of the poppy industry to be saying, 'We don't want these people doing that stuff over here because we have our international reputation' when we have had three Danish tourists die over 10 years. What does that do to our international reputation? There are risks with the poppy industry with their international reputation in what they are doing now.
- **Mr WILKINSON** Yes, and I think they are acutely aware of that. In these circumstances in policy making and decision making it is also something to be mindful of.
- **CHAIR** The evidence we have had is that you do not die from marijuana. If it is marijuana or cannabis that has a high THC content and you have a tendency towards schizophrenia, maybe you become schizophrenic, which is obviously a very poor outcome as well. Your point is that you are aware of their concerns. Do you share their concerns?

- **Ms WILSON** We think the poppy industry is important to Tasmania. With a farmgate value of anywhere between \$90 million to \$100 million, as the agricultural department of course we are going to listen to Poppy Growers Tasmania around any concerns they raise about ensuring their concerns are listened to and understood in developing policy.
- **CHAIR** Do you think they are right to be concerned that their international reputation is potentially at risk?
- Ms HISLOP It would be a personal opinion.
- **Mr MULDER** In the context of that question, is it because of the Single Narcotics Convention that they see the potential for international damage?
- **Ms WILSON** I would not put it in those terms. The regulation of poppies comes under the International Narcotics Control Board and conventions and they are always mindful of the requirements to ensure the INCB is comfortable with the production of poppy growing process in Tasmania.
- **Mr MULDER** Article 28 of the Single Convention on Narcotics simply says that the cultivation of cannabis applies the same controls including security et cetera as applies to opium poppies, so I am not sure how cultivating cannabis under the same convention and conditions as applies to the cultivation of poppies could cause them any concern.
- Ms WILSON I think that this a matter to take up with Poppy Growers Tasmania.
- **Mr MULDER** We will take it up with them but we were just getting your perspective about the international damage that they are referring to and if it is this article then we are about to have a wonderful discussion down the track.
- **CHAIR** For term of reference number four, the legal implications and barriers to the growing and commercialisation of cannabis flower and extracted cannabinoids in Tasmania, you were not involved in that. I would have thought this was Primary Industries' area again.
- Ms HISLOP Not the legal implications, no.
- **CHAIR** Who can speak to that? We might need to get someone else from DPIPWE.
- **Ms HISLOP** Justice, I would suspect.
- **Ms WILSON** Sorry, I am going to get to the right page in our submission. Are you looking at page 22?
- **CHAIR** Does the growing of it relate to the Poisons Act?
- **Ms WILSON** That is correct. By way of example, for the poppy industry DPIPWE does not license growers and manufacturers. That is why we are not the regulator.

- **CHAIR** So is the chief pharmacist the regulator of the growing of poppies or is it Justice? . It is Justice, isn't it?
- **Mr GALLOWAY** The growing is under section 52 of the Poisons Act. The pharmacists of our branch are delegates for signing off on the growing of poppies though all the administrative work is done by the Poppy Advisory Control Board.
- **CHAIR** The question I asked earlier, Jim, was about the legislative barriers to conducting a trial, of which there are none except that the minister has to provide an exemption.
- Mr GALLOWAY He has to determine conditions of the trial, yes.
- **CHAIR** That is for growing it or for looking at a model to dispense it?
- **Mr GALLOWAY** In attachment 6 in the papers I have given you are three elements. Section 52 is the first element, the growing, and we can specify conditions around that and it could be done under the auspices of the university or done separately. Then there would be the processing and once that starts that would need to move into the sphere of the university because use and processing, et cetera, can only be done in an exempted public institution. That would be done under section 55(2) and then the medical trial would be done again under that same section under the determination of conditions by the minister.
- **Mrs HISCUTT** That might bring me to what I was talking about earlier because you have got three separate things here the growing, the processing and the trials. If there were horrendous conditions that one may have to comply with to grow, do you see as still possible to import the raw product from the mainland somewhere or wherever -
- **CHAIR** Canada, probably.
- **Mrs HISCUTT** to then put into our universities or a proper facility to do the processing and the trials? Do you see that as being a possibility?
- **Mr GALLOWAY** Yes, that would be possible. For instance, currently there is a trial at the university with substances such as ecstasy and saliva detection trials have been done in the chemistry department and they import MDMA and other schedule 9 substances directly from overseas for that.
- **CHAIR** Who approved that, the department or the minister?
- Mr GALLOWAY The previous minister.
- **CHAIR** Do we need federal approval to import such a product, being an illicit substance?
- **Mr GALLOWAY** Not to my knowledge. It is usually done through a chemical import company like Sigma. They might deal with the importation permits and things at that level.

Mrs HISCUTT - Intrastate would not be a problem?

- Mr GALLOWAY Not as far as our legislation goes. It would be about them complying with their legislation as well at that end. These plants are prohibited but there are arrangements under the convention for medical use of plants but to become part of normal medical practice they need to be moved into schedule 8. Sativex and nebilone been moved into schedule 8 so they can become part of the normal prescribing mechanism and as long as these substances are properly regulated and accounted for there is nothing to stop them becoming part of the more medical usage.
- **CHAIR** Can we move a drug from schedule 9 to schedule 8 on the state level or does that need to be done by the Commonwealth?
- **Mr GALLOWAY** It could be done. Our scheduling is by reference to the national standard currently so -
- CHAIR It can conflict with that without being -
- Mr GALLOWAY The minister has the discretion to move something into schedule 8 from schedule 9. My deputy and I have been talking the last day or so with some of the other states about the potential for moving cannabidiol into schedule 4 or 8 which might fix some of these problems we are talking about where you might want an antiepileptic without all the confines that exist around a schedule 9 substance. It eases up those restrictions so there might be potential for dealing with it that way.
- **CHAIR** We do not need to change the law for the minister to make a determination, but obviously he would want more information to change it.
- Mr GALLOWAY No, it is an alteration to the poisons list.
- **CHAIR** We deal with those all the time.
- **Mr GALLOWAY** That is right, but I think the preferred method would be to have the national standard altered and there has been an indication from other jurisdictions that there is some -
- **CHAIR** The Prime Minister seemed quite keen to entertain the idea with Tony Jones yesterday.
- **Mr GALLOWAY** Yes. The minister lives in a political sphere and I live in a regulatory sphere and I guess I am looking at the regulatory options but they exist.
- **CHAIR** Yes, I am not denying that for a second.
- **Mr GALLOWAY** Yes. I think that is something we will look at over coming months and it will be done under therapeutic goods legislation to shift the cannabidiol, so that might solve some of our problems.
- **CHAIR** I want to take you to part of the submission we got from the Alcohol, Tobacco and Other Drugs Council Tasmania. It was an interesting submission to read but I want to go

to their conclusion because it poses some suggestions and I would like to your feedback on those. It says:

Australia is a signatory to the 1961 United Nations Treaty that specifically permits the use of cannabis for scientific and medical purposes. As such, the ATDC supports exploration and consideration of the introduction of a medicinal cannabis scheme in Tasmania for people suffering from symptoms and illnesses such as those discussed above.

The ATDC recommends an open-minded yet cautious approach to the regulation of medicinal cannabis in Tasmania, although thorough evaluation frameworks would need to be included in this process to ensure that legislation and regulation is reflective of the needs of those who require the use of cannabis as a treatment option.

The ATDC understands that a range of health and regulatory issues surround the use and regulation of medicinal cannabis but recommends that the Tasmanian Government accepts the evidence and looks to the following recommendations -

I will do this one at a time so you can comment on each of the four recommendations. The first is:

That a clinical trial of natural botanical medicinal cannabis products is conducted to build evidence and research based on the efficacy and safety of cannabis products for therapeutical approved purposes.

Mr GALLOWAY - We have already said that option is available. The Poisons Act says 'at the discretion of the minister'.

CHAIR - So it is up to the minister to make that determination?

Mr GALLOWAY - That is right.

- **CHAIR** The next is that the Tasmanian Government gives further and detailed considerations to the issues surrounding the growth and supply of cannabis products for medicinal purposes.
- **Mr GALLOWAY** Like I say, there are provisions for growing. I guess it is government policy. The Government has indicated that it does not back a commercialisation agenda because of public health and safety concerns.
- **CHAIR** We may need to invite the minister to have a chat. They usually don't attend, that's the only problem.

The next is that the Tasmanian Government considers amending the Misuse of Drugs Act 2001 to allow for medicinal cannabis use. What amendments would be required to allow for medicinal cannabis use?

- **Mr GALLOWAY** We already have an example of that I guess in Sativex. Where there are provisions allowed under the Poisons Act they are not negated by the Misuse of Drugs Act. If you read the preamble in the Misuse of Drugs Act -
- **CHAIR** The Poisons Act overrides that?
- **Mr GALLOWAY** Yes. Sativex has been properly evaluated for quality, safety and efficacy by the Therapeutic Goods Act and is now schedule 8. There are technical problems currently with its distribution but it is possible under the convention and the law in Tasmania to do that where it decides in that schedule.
- **CHAIR** Do we really need an amendment to the Misuse of Drugs Act?
- **Mr GALLOWAY** I don't think so. I don't believe someone with a permit to use Sativex would be in breach of the Misuse of Drugs Act.
- **CHAIR** The final one is that a detailed education strategy is considered to accompany any legislation amendments to inform all key stakeholders including the medical profession, alcohol and drugs sector, patients and families and the broader community.
- **Mr GALLOWAY** I would back that. As we have discussed earlier, we would be loath to see a repeat of all the problems we see around opioids in the community with these substances.
- Mrs HISCUTT Do you know the cost of a poppy licence and the police checks?
- **Mr GALLOWAY** There is no charge to my knowledge at the moment for a poppy licence. I was at a Poppy Board meeting this morning and understand there is a two-year delay proposed on any charges to the industry around that. Someone would be paying for police checks around a licence.
- **CHAIR** We have to pay for those when we have them done here. Thanks for your time today. We may need to call you back when we have received further evidence, but thanks for your time and the submission, it has been helpful.

THE WITNESSES WITHDREW.