**Perinatal and Maternal Mortality Review Committee webinar: Doing things differently**

**Accessible transcript**

**Visual**

**The first slide appears. It is titled ‘Perinatal and Maternal Mortality Review Committee webinar’ in blue, underneath in green is written ‘Doing things differently’. There is a list of four things under this headed Housekeeping. On the left is a picture of a bird singing, beside that is ‘Audio check: can you hear birds singing? (sound effect). Underneath the bird is a black square with the camera icon in it, beside it is ‘Please submit your questions for our speakers using the Q&A thread’. Below the camera image are two boxes, on the left it contains the chat icon, and on the right is a hand icon. Beside this is written ‘Chat and raise hand functions have been disabled’. The last image is the settings icon, beside this is ‘For technical issues, email jess.bilton@hqsc.govt.nz’.**

**There is a blue band across the top of the screen. In the top left corner is written ‘Health Quality & Safety Commission New Zealand Kupu Taurangi Hauora o Aotearoa’. The blue and green logo comprises of three thin squares with white circles of differing size within them. In the bottom left corner is written ‘Perinatal and Maternal Mortality Review Committee. The logo comprises of a grey tear shape within which is a red koru. The following slides all have the same design.**

**Audio**

(Birdsong)

**Visual**

**The next slide appears. The title reads ‘Karakia’, below is written ‘Denis Grennell, below again is ‘Ngā Pou Arawhenua’. To the right of the screen is a box. It shows a video of Denis, he has glasses and a beard and is wearing headphones and a blue shirt. There are pictures on the wall behind him.**

Audio

Tēnei au e mihi ana ki a tātou, kua tae mai ki tēnei whakarewatanga o tēnei pūrongo. Nō reira, ki ngā reo, ki ngā mana ki ngā karangaranga maha kei waenganui i a koutou, tātou. Ki ngā maunga whakahī, ki ngā waka tapu ki ngā wai tapu. Tēnei au e mihi ana ki a koutou katoa, hei māngai mō te rōpū nei. Welcome everybody to the launch of this significant report. Just want to acknowledge all the connections amongst us that have gathered, those that are known, those that are unknown. We'd like to start this with a karakia because from our world view as indigenous people of Aotearoa we're not talking about numbers in a report, each of those numbers represent a person from the divine. People are tapu these figures represent people that we've lost. With that in mind we'd like to ensure that we begin this correctly in terms of te ao Māori tikanga whakaaro. We'd like to express that the report has a significant challenge in it and that challenges is to the systems, they are of the health system that have not necessarily significantly changed so that especially for Māori and Pacifica women and babies, statistics either stay the same or grow. This is not true for other areas. So I'd like to make the point that this is not about individuals, this is about systemic change. No reira. So with that let's start with the karakia.

No reira unuhia, unuhia
Unuhia te uru tapu nui
Kia wātea kia māmā te ngākau te hinengaro te wairua ki te ara takutūWhakairia ki runga i rongo
Ae rā ko wātea
Rere, rere, pai mā rere
Tēnā tatou.

**Visual**

**The next slide appears. The heading reads ‘Welcome and introductions’. Under that is written ‘Mr John Tait, Perinatal & Maternal Mortality Review Committee (PMMRC) chair. The video box of Denis is replaced by one showing John Tait. He is wearing a white shirt.**

Audio

Tēnā koutou katoa. Welcome everyone. My name is John Tait, I'm an obstetrician and gynaecologist and chair of PMMRC. I would like to begin by acknowledging the mothers and babies, families and whānau that bear the grief of losing those loved ones whose lives and deaths are represented in the 14th PMMRC report. I would also like to take the opportunity to thank the Committee, the working groups, the secretariat, Jo, Sarah, Kirsty and Kere Gabrielle and her Otago group, the epidemiologists and particularly I would like to thank the local coordinators without whom this report would not have been possible. So the first thing that we're going to present is an overview of the 14th report which will be done by Dr Rose Elder and associate professor Donna Cormack.

**Visual**

**The next slide appears. The title in blue is ‘Brief overview of the 14th report’. Underneath is written ‘Dr Rose Elder, deputy chair PMMRC and Assoc Prof Donna Cormack, PMMRC member. Under that, in blue is written the word ‘Wero’ and Mr John Tait is written under in black.**

Audio

Rose is an obstetrician and gynaecologist working at Capital & Coast health, clinical leader of obstetrics and has been a coordinator for PMMRC for several years. She's been a member of the Committee since 2015 and is also a member of the maternity mortality review working group. Associate professor Donna Cormack has been a member of PMMRC since 2018 and she brings her expertise in kaupapa Māori, racism, ethnicity data, knowledge and expertise in data governance. She is a teacher and lecturer with joint positions at Otago and Auckland. So without any further ado can we ask Rose to begin the brief overview of the 14th report.

**Visual**

**The next slide appears. It is headed ‘Te tuku purongo mō te mate te whakamate 2018, Reporting mortality and morbidity 2018’. Under is written Dr Rose Elder 23 February 2021. A video box on the right shows Dr Elder. She has short dark hair and is wearing glasses and a blue dress.**

**The Commission’s logo has moved to the bottom left hand side of the screen, and is in black and white. The PMMRC logo is on the bottom right hand side. The background is a white koru on grey. The video box of Mr Tait disappears.**

Audio

Kia ora. Ko Rose tōku ingoa. My name's Rose Elder and I'm an obstetrician gynaecologist in Wellington and I'm the deputy chair of the Perinatal and Maternal Mortality Review Committee. Today I'm going to give a brief overview of the PMMRC monitoring report which outlines some of the trends and mortality and serious morbidity.

**Visual**

**The next slide is titled ‘Our vision’. This is written in both Māori and English. These are read out by Rose. The PMMRC logo is now in the top right hand of the screen, and is in a large grey circle. This stays for the following slides.**

Audio

The aim of our work is to monitor trends and look at systems issues that could be modified to prevent future deaths. Working together across the system towards zero preventable harms and death for all mothers and babies, families and whānau. This is our vision.

**Visual**

**The next slide appears. This is titled ‘The 14th PMMRC report’ Underneath is a list of bullet points. Rose reads through these. On the left is a grey square showing the cover of the report. At the bottom in green is a link to a website for more information.**

Audio

This is our 14th report and you'll see that different parts of data have different time frames attached to them and you can see those listed there. If you want any more information there's a link at the bottom of that slide.

**Visual**

**The next slide is titled ‘Perinatal mortality’, under which is written ‘Since 2007 there has been a decrease in overall deaths’. Below this is a line graph with four different coloured lines. Orange at the top, then grey, blue and red. On the left axis is written ‘Mortality rate 1000 births’. Across the bottom axis are the years from 2007 to 2018.**

Audio

At this stage I'd like to acknowledge the system that's been set up and those that continue to work to develop it and support it. Mostly though I would like to acknowledge women, babies family and whānau who have shared their information. This is a very precious gift that women and babies to women and babies of the future and continues to be a great responsibility. In this slide you'll see the perinatal mortality over the years since 2007. Statistically significant reduction in deaths and this is good news but we need to understand a little more. We need to look at different groupings of babies in this slide to understand it with more detail.

**Visual**

**A box with an orange border appears to the right of the orange line; an orange arrow points to the line on the graph. Inside the box are the words ‘Perinatal related mortality: Is after 20 weeks gestation (400g if gestation not known) up to 28 days after birth’.**

Audio

In the next slide you'll see the definition for the line at the top of the graph which is the perinatal-related mortality. This is the overall deaths from babies after 20 weeks of gestation and 400 grams if the gestation is not known, up until 28 days after birth.

**Visual**

**A box with a grey border appears to the right of the grey line with an arrow pointing to the grey line on the graph. In it is written ‘Stillbirth: fetal death from 20 weeks gestation to birth (excluding terminations).**

Audio

The next line down is the still birth rate and this is fetal deaths after 20 weeks gestation up until birth and it excludes terminations.

**Visual**

**A box with a blue border appears with an arrow pointing to the blue line on the graph. The text inside reads ‘Neonatal death: After birth up to 28 days of age (early & later neonatal deaths)’.**

Audio

The blue line is neonatal deaths and this is after birth up to 28 days of age and further can be defined into early and late.

**Visual**

**A box with a red border appears with an arrow pointing to the red line on the graph. In it is written ‘Termination: interruption of pregnancy after 20 weeks gestation’.**

Audio

And the last red line is terminations and this is interruption of pregnancy after 20 weeks gestation.

**Visual**

**The next slide appears. It is headed ‘Findings’. It is a list of bullet points which Rose talks to. In the background is a large green arrow pointing downwards.**

Audio

In this slide here you will see that there has been a significant reduction in the deaths overall in Aotearoa New Zealand, and this includes overall perinatal deaths and but also stillbirths especially in spontaneous preterm labour or rupture of membranes and also intrapartum stillbirth in babies at term which is after 37 weeks. There's been a drop in hypoxic peripartum deaths so a lack of oxygen around the time of death, and rates of neonatal deaths for those born at or over 41 weeks has also had a reduction. The mortality rate of intrapartum stillbirth and babies at 23 to 27 weeks is also seeing a reduction over this time. There has also been some evidence for a reduction in peripartum death from maternal hypertension and maternal conditions and other neonatal deaths without an obstetric antecedent. There has been a not statistically significant downward trend in maternal mortality. This is great news and it encouraged me greatly that work being done in the sector to optimise care has been occurring. Education about side sleeping, smoking cessation, blood pressure management, monitoring growth, fetal movements, these have all been really positive things. But however, we need to ensure that all of the population is better benefiting from these changes.

**Visual**

**The next slide appears, titled ‘Ongoing inequity’. Below is a list of bullet points which Rose talks through. This slide reappears after each graph is shown. Highlighted is ‘Stillbirth deaths for babies of Pacific, Indian mothers’**

Audio

Now if we go to the next slide you'll see that there is ongoing inequity. Unfortunately perinatal deaths of Māori, Pacific, Indian and other Asian, middle eastern, Latin American and African ethnic groups are not decreasing. We need to progress the reduction in perinatal mortality and morbidity for population groups that are seeing an inequity in outcome. Specifically stillbirth deaths in Pacific and Indian mothers and neonatal deaths in Māori, Pacific and Indian mothers is not seeing a reduction.

**Visual**

**The next slide is a bar graph titled ‘Perinatal related mortality rates per 1000 births, by maternal prioritised ethnic group 2014–18. Each bar is a different colour representing a different ethnic group. The bottom axis shows the causes of death.**

Audio

If we go to the next slide in this graph we can see that there are higher rates in some populations.

**Visual**

**Four circles appear over the bar graph to highlight specific areas.**

Audio

In the next slide I've highlighted some areas specifically on the slide so in stillbirths there is a higher rate especially for the Indian, Pacific. Neonatal deaths in Māori, in Pacific and Indian and this is reflected in the overall perinatal related deaths.

**Visual**

**The screen goes back to the ‘Ongoing inequity’ slide. Highlighted in bold is ‘The stillbirth rate for babies of mothers under 20 years of age’.**

Audio

Still birth rates in mothers under 20 is approximately one and a half times higher than mothers who are 20 years and over.

**Visual**

**The next slide is a bar graph titled ‘Perinatal related mortality rates per 1000 births by maternal age 2014–2018’. This time the coloured bars represent different age groups. The bottom axis shows causes of death. The red bar, for women under 20, is circled.**

Audio

This is shown in the next graph with a higher rate in the red here which is the under 20-year-olds and much higher overall perinatal-related deaths, that is from the neonatal and stillbirth groups.

**Visual**

**The screen goes back to the ‘Ongoing inequity’ slide, on which is highlighted the third bullet point ‘Mothers living in the most deprived are (quintile 5)’**

Audio

Next slide, also mothers living in deprivation which is quintile five are not seeing a fall in their perinatal deaths for their babies. They're more likely to lose their baby from stillbirth, neonatal death and perinatal-related death overall compared to those living in other quintiles.

**Visual**

**The slide shows a bar graph titled ‘Perinatal related mortality rates per 1000 births by NZDep2013 quintile 2014–2018’. The left axis is perinatal related mortality rate/1000 births, the bottom axis shows causes of death. The bars represent different quintiles, from 1–5. The bar representing quintile 5 is circled.**

Audio

And you'll see that in this slide here with the slight light blue colour showing an increase in the rate that is statistically significant for these women.

**Visual**

**The next slide appears and is titled ‘Classification of perinatal related deaths in 2018 using PSANZ\_PDC’. Below is a detailed table which Rose refers to.**

Audio

The next slide is slightly busy with lots of numbers and lots of things listed. It is explaining the perinatal deaths that are classified according to the Perinatal Society of Australia and New Zealand which is known as PSANZ, as a death classification for babies and for perinatal and neonatal deaths.

**Visual**

**The table remains but the first line ‘congenital anomaly’ is circled.**

Audio

And then in the next slide it shows the most common cause of death is congenital anomaly which accounts for about 26 percent of deaths.

**Visual**

**The table remains, a new circle replaces the first, now around ‘Spontaneous preterm labour’.**

**On the next slide is a table titled ‘The actual numbers of babies with a stillbirth classification of hypoxic peripartum death by year’. Under this is two rows of boxes, the top boxes are for each year and the bottom is a corresponding number.**

Audio

And the next slide the most, second most common cause is around spontaneous pre-term birth or labour or rupture of membranes and this is around 16 percent of deaths.

**Visual**

**The classification table reappears, the circle is still around ‘Spontaneous preterm labour’.**

Audio

Around a quarter of still births are classified as unknown or unexplained and these are babies where there's been no medical or um maternal or fetal reason for the death or and there's been no investigations as to the cause of death. And around 30 percent of babies had a post-mortem in 2018, and I think this is an area where we can improve knowledge for women going forward.

**Visual**

**The next screen is a table titled ‘Classification of hypoxic peripartum death stillbirth rates (per 1,000 births) by year’. Under this is two rows of boxes, the top boxes are for each year and the bottom is a corresponding number.**

Audio

On the next slide I've expanded that last slide to show a classification of the hypoxic peripartum death rates by year and it's shown a reduction over the period from 2007 to 2018 that has been statistically significant. However when we look more closely at this decline it is really driven by a drop in the rates for New Zealand European mothers.

**Visual**

**The next slide is headed ‘Neonatal Encephalopathy, NE’. Under this is a line graph, the left axis is NE rates per term births.**

Audio

And the next slide was babies known to have higher rates of NE include babies of mothers having their first baby, mothers living in quintiles two to five, babies whose gestation is at 37 weeks or at 49 weeks, a birth weight of under 2500 grams babies who are small for gestational age and also in multiple pregnancies from 37 weeks.

**Visual**

**The next slide appears. The title ‘Maternal Death’ is in a green box at the top. Underneath is a drawing of a woman wearing orange, sitting in a large blue flower, the number 10 is written large in blue text beside it.**

Audio

In the next slide we're going to move on to consider maternal death and this tragically happens to approximately 10 women each year and post- I just like to reinforce that post-mortem does really help in improving understanding of maternal mortality both for going forward but also for the families involved. In this report it is defined as women who die during pregnancy and that's at any gestation or they die 42 days after a pregnancy of any gestation.

**Visual**

**The next slide appears, titled ‘Maternal Deaths’, underneath is a list of bullet points which Rose talks through.**

Audio

Again, we divide those into separate groups and on the next slide we show that these can be divided into direct, indirect, unknown or coincidental. In 2018 we had 10 maternal deaths, then that's not including the coincidental deaths. Over the whole time period from 2006 to 2018 there were 68 direct deaths and 50 indirect maternal deaths. And we know that the risk of maternal death is increased at those over the age of 40 years of age and we also know that the highest prioritised ethnic groups involved with perinatal with maternal death are Māori and Pacific women who have the highest rates at around 23 or 22 deaths per 100,000 maternities.

**Visual**

**The next slide appears, the title ‘Maternal mortality - indirect’ is on the left. On the right is a bar graph titled ‘Cause-specific maternal mortality ratios in New Zealand 2012-2018 and the UK 2012-2017’. The left axis is labelled ‘Maternal mortality ratio/100,000 maternities’. The bottom axis is labelled ‘causes of maternal death’.**

Audio

So just going through the slide, direct deaths are related to obstetric events, uh indirect deaths are related to pre-existing conditions or conditions not related to obstetric events. The slide that's showing at the moment shows a comparison with the UK data on maternal deaths and we use the United Kingdom because they have a comparable way of collecting information so we think it's a good comparison. And this shows the indirect deaths so that's either pre-existing conditions or conditions that occur during pregnancy that aren't obstetric conditions so they might be cardiac or neurological or other infections such an appendicitis that wasn't related to an obstetric condition but was probably made worse by the pregnancy. And here you can see our rates are fairly similar with the UK data um although it does show that coincidental deaths are higher in New Zealand.

**The next slide appears, the title ‘Maternal mortality - direct’ is on the left. On the right is a bar graph titled ‘Cause-specific maternal mortality ratios in New Zealand 2012-2018 and the UK 2012-2017’, the left axis is labelled ‘Maternal mortality ratio/100,000 maternities. The bottom axis is labelled ‘causes of maternal death’.**

Audio

And there were 68 direct maternal deaths in the time period from 2006 to 18. And over this time we have changed our classification of where we put maternal suicide and we've gone with aligning with the WHO where it is put in the direct maternal deaths. And that is the one area where we show a significant difference from the UK data. It is the leading cause of maternal death in New Zealand is suicide with 30 deaths in this time period. And that's 23 percent of our maternal mortality. Amniotic fluid embolism is the second most likely direct cause of death at 14 deaths and when we compare to the UK data we are significantly different and wāhine Māori are statistically higher rates of maternal death due to suicide compared to New Zealand European And this is very disturbing. In the NHS they have in 2019 invested significantly in this area so they have put $239 million pounds into a five-year project for specialist and community-based maternal and perinatal mental health services. In New Zealand no government budget has been given specifically to reduce maternal suicide and deaths and maternal well-being investment is limited, yet again wāhine Māori are over-represented in deaths and 3.35 times more likely to die by suicide than New Zealand European women. This is not okay.

**Visual**

**The next slide appears. It is headed ‘What can we do?’. Under it the screen is divided in two. On the left is a drawing of a woman holding a swaddled baby. To her right are two slices of bread with a green tick on them. To her left is a green arrow pointing down, with a percentage symbol in it. On the right of the screen is a drawing of a pregnant woman sitting in the palm of a big hand. Beside her are two blocks of writing that Rose refers to.**

Audio

So now I'd like us to consider what can we do to address the perinatal and maternal mortality and morbidity in Aotearoa New Zealand. PMMRC has continued to ask for bread and flour to be supplemented as it is in many other countries and this is because it has been shown to reduce the number of neural tube defects with it which is a type of congenital anomaly. We also would ask district health boards and primary care providers to consider active navigational support to help women find and register with an LMC, midwife or carer with minimal delay, and this means that they can achieve their early antenatal and antenatal care. This will mean that they have addressed any modifiable risk factors, they'll be supported to smoking cessation or with any health conditions that will need early diagnosis and intervention or treatment for things such as infections.

**Visual**

**The next slide is titled ‘What can we do?’. Below are four green boxes. The top left shows an apple tree with a person on each side of the trunk on the ground. The tree slopes to the left. Written beside the tree is the word ‘Inequality’. The top right box is the same tree, the two people are on a ladder each. The person on the right can reach the apples, the person on the left cannot. The title is ‘Equality?’ The bottom left box is the same tree, the person on the left now has a taller ladder and can reach the apples, this is ‘Equity’. The bottom right box shows the two people on equal ladders, with the tree propped up to make it upright. This is titled ‘Justice’.**

Audio

On the next slide you'll see a diagram that is considering equity, I think it's important for every person and every leader of a system that we have a responsibility, honouring the Treaty of Waitangi is a fundamental part of that. We need to provide culturally safe care, we need to ensure that Māori have an equal voice at the decision-making and I think this will improve the outcomes for all women. And as we've already talked about, active navigational support for women to get care, support of cultural and clinical needs working together. And for all of this we need an adequately resourced maternity sector. So our wero or challenge to us all is for us to work together to implement the PMMRC recommendations that have been put out there over the years. This needs urgent action and it's centred around equity and this is to reduce the perinatal mortality for those who are over represented in the deaths. We've shown that we can decrease the deaths so let's take on this challenge. Care must be delivered to meet the needs of women and this is why we need to take responsibility to partner with women and co-design care models that will fit with their needs. Owning these responsibilities together we can make the greatest and the most valuable impact towards changing the outcomes for women and their babies, families and whānau. Thank you for your time watching this.

**Visual**

**The next slide appears. On the left is a black box with ‘Ngā mihi’ written in the middle in white. On the left is the PMMRC logo in large. Another slide then appears, it is the ‘Brief report’ slide again as shown previously. John Tait is in a video box on the right. John disappears and is replaced with a video box of Donna Cormack. She has short grey hair, glasses and is wearing black.**

Audio

Before I introduce, reintroduce Donna, I would just like to remind everyone that there is a question and answer thread and the question and answers will be available at the end of the presentations. So our next speaker is going to be associate professor Donna Cormack who I have already introduced. Donna. Kia ora. Ko ti mea tuatahi he mihi ki a ratou ko whitirangi tia. Ki o ratou whānau hoki, tenei te mihi aroha ki a ratou. O te rā kia tātou te honga oranga kia ko huhu mai a Apurangi tēnei rā tēnā no tātou katoa. Huri tēnei no Kai Tahu no Kāti Māmoe. Ko Donna Cormack ahau. Kia ora, I'm Donna Cormack, and as John said earlier I've been a member of PMMRC since 2018 and I am a researcher and teacher at Te Kupenga Hauora Māori at the University of Auckland and Te Rōpū Rangahau Hauora a Eru Pōmare at the University of Otago. I'm not going to speak for long but I just wanted to add some brief thoughts to sit alongside the presentation that Rose has given outlining the patterns and trends from this 14th report and thinking back to Dennis' opening, always keeping in mind that the numbers in this report represent the lived experiences, the grief and loss of whānau. In particular I want to make a few points about the persistent inequities that we see in these monitoring reports, and these inequities are an expression of broader structural inequities in our society. They represent the impacts of ongoing colonialism and racism as they play out through the differential distribution of communities to the conditions that are needed to be well, and to the exposures and environments that are damaging to our health. As an example, the report highlights how deprivation is associated with the number of outcomes in this space. And this is a well-established area of public health knowledge. We also know that in Aotearoa New Zealand deprivation is highly racialised. Māori, Pacific peoples and other groups marginalised in oppressive systems are much more likely to live in areas of high deprivation. So if we're truly committed to eliminating inequities, we also have to reckon honestly and urgently with our society's ongoing tolerance for inequity in life opportunities, resources and experiences. COVID-19 has shown us how quickly the Government can move when it makes a decision to act. It can literally move overnight, so not moving urgently in these other areas to address poverty, adequate incomes, safe housing are equally active decisions by the Government, government agencies and other institutions. The inequities also represent the differential access to and quality of health care for Māori which is well established, and has recently been discussed comprehensively as part of the ongoing Waitangi Tribunal Māori health claim. Over the years the PMMRC has made a number of recommendations and reports about ways in which the health system and health providers can work to improve care, to provide care that's clinically competent, that's appropriate, that's anti-racist and that's culturally safe, and ultimately the work we can do to eliminate inequities. Our systems are complex and there's often multiple factors at play that contribute to health outcomes, but there are also simple everyday things that those of us in these systems can do to make change. Transformation needs to become a conscious, everyday practice until we achieve the system that our tamariki and mokopuna deserve. We recognise there are many people working hard to achieve change in this space, and this includes the critical work of mighty providers and organisations, often in environments of unstable and short-term funding and contracting. We also, can we also know that change is possible as we've seen in the report, with improvements that have taken place in some areas for some groups. For me what's missing is the broader commitment to comprehensively supporting and resourcing what is necessary to achieve the best possible outcomes for all whānau, and to avoid the tragedy and loss that these statistics represent both in terms of transforming existing systems, but also where alternative services and responses self-determined by Māori should be operating and supported. Associate professor Ruha Benjamin reminds us we need to imagine and craft the worlds we cannot live without, just as we dismantle the ones we cannot live within. The data and stories we hear in this Committee and this report and in the presentations today, these inequities speak to me of a world I cannot live within. It's not the world I envision for my mokopuna and I don't believe it's the world our tūpuna envision for us. So what I hope this work does in the conversations and transformative actions that must follow, is move us closer to the world that our mokopuna deserve where they are well as Māori, and where we are all well. No reira i roto i te tēnā whakaaro. He mihi aroha ki a koutou. Mauri ora.

**Visual**

**Donna’s video disappears, and the screen is replaced with a full picture of John Tait. He is wearing white, has glasses and there is a blind down over the window behind him.**

Audio

This year we have taken a very different approach to our report. We have commented for a number of years now that although the perinatal death rate is reducing, it is only reducing in one category and that is New Zealand European. We've also made over 120 recommendations and of those only 50 percent have been fully implemented. So this year we decided not to make any recommendations but to put a challenge out to the sector, to government, to DHBs and to the Ministry of Health. We acknowledge the enormous work that is being done by the sector in trying to improve perinatal outcomes, but at the moment the amount of work that's being done is not being shown in our outcomes. So we have written to the five different stakeholders with the specific recommendations for them and we hope that this time something will happen so that we will have an equitable outcomes for our babies. Thank you.

**Visual**

**The next slide appears. The heading at the top in blue is ‘Ngā wānanga o Hine Koopu’. Underneath are the names of the two speakers, Raewyn Smith and Csandra Ogle-Plunket. A video box of Donna Cormack appears in the top left corner.**

Audio

So kia ora, I would just like to now introduce the next speakers. So first I want to introduce Raewyn Smith. Raewyn was born and raised in Palmerston North. Her parents are from Waihou Valley in Ōkaihau, Te Tai Tokerau... and they belong to the local marae Piki Te Aroha in Parawhenua. Raewyn moved from Palmerston North to Te Tai Tokerau in 2000 and has worked in various roles in both addiction and mental health fields over the last 20 years. Her passion is in maternal and infant mental health and addiction services. She was team leader and part of the team that developed the parental and pregnancy service in Whangārei and Kaitaia and over the past two and a half years Raewyn has worked as a SUDI prevention coordinator in Te Tai Tokerau and most recently has held the role of programme leader for child health Ngā Tātai Ihorangi with the planning and development office for the Northland District Health Board. Cassandra, the co-presenter for this presentation, was raised in Whangārei and her parents are from Kamo and Hokianga. She returned to Te Tai Tokerau in 2004 sorry and began her midwifery journey eventually working as an independent midwife. She's spent the past eight years working with whānau and family start, antenatal education and Hāpu Wānanga and has been with the SUDI team for the past two years. And the presentation today is Ngā wānanga o Hine Koopu and I'll hand over to you now Raewyn.

**Visual**

**The next slide appears. The background is blue fading through to pink. The title in the middle is ‘Te Wananga o Hine Kopū’. In a large circle to the right is a picture of a group of people sitting down, on the floor in front of them are baby cribs each with a purple bag in them. In the top right corner is a video feed of Raewyn. She has brown hair and is wearing glasses.**

Audio

Kia ora. Kia ora. Kia ora koutou. Ngā mihi nui Denis mo to karakia mo tenei hui. Ngā mihi John, mo tō mihi mo tēnei kaupapa e tēnei rā. Te Ahuahu te maunga, Ōmāpere te roto, Hokianga te moana Matatā o te waka, Ngāpuhi te iwi, Te Uri Taniwha te hapu. Arawhenua te marae, Ko Nick Smith o rangatira. Tēnā koutou, tēnā koutou, tēnā koutou kātoa. Hi I'm Raewyn and I'm a mother of four daughters and five mokopuna and I also work at Northland health and are part of the Hapū Wānanga team. Before I start I just wanted to acknowledge in this space the creators of this wānanga... Koha Aperahama, Tash Wharerau and Rachel Hitaraka along with pewhairangi midwives. I also want to acknowledge Ngāti Hine Health Trust, Te Ha Oranga, Te Hiku Hauora, Hokianga Health and Northland District Health Board for enabling the spaces that we occupy for Te Wananga o Hine Kōpu. I want to start off with this little tohu from Moe Milne in 2001. The gift that my ancestors and parents gave to me is the confidence in being Māori. So where does this journey begin? In 2009, we had a Hapu o Rā Wananga running up in Kaitaia, that was run by Colleen Brown. So in the mid-north Wiki Davis and Crete Cherrington and Koha had a conversation noticing that many of our Māori hapū mums weren't attending the local antenatal classes. They talked about the wānanga that was running up in Kaitaia and wanted to develop something similar in the mid-north. With that came the wānanga Te Mata O Mua. So this was more than 11 years ago. This wānanga was about improving health engagement with whānau Māori in the antenatal space. In 2016 Northland District Health Board engaged a review of hapū wānanga antenatal education programmes being delivered into Tai Tokerau. The recommendation was a culturally-specific targeted approach is needed to address the long-standing health inequities experienced by Māori women and their babies in Te Tai Tokerau. I tend to find that hapū wānanga is an early intervention that has the potential to address long-standing lack of engagement and access to a group-based antenatal education that helps set up Māori women and whānau for better outcomes. At the time there were around 20 percent Māori hapū mums who were attending antenatal classes as opposed to non-Māori which was sitting at around 68 percent. With this the Northland District Health Board offered to roll out our Hapū ō Rā wānanga across Te Tai Tokerau and Te Wananga o Hine Kopū was created. Te Wananga o Hine Kopū is a co-design programme that was designed with insights from whānau, the community and community agencies. The focus would be on hapū whānau rather than hapū mums, so mums, dads, grandparents, siblings, neighbours, anyone who is connected to this pēpi and who will have a vested interest in their future, were invited to come along. I just want to change the slide.

**Visual**

**The next slide appears. The screen is divided into three sections. Each section is split in half, the bottom half is a purple box with a heading of a pou. Above each box is a colourful representation of the pou. Raewyn speaks through them.**

Audio

He kākano au, i ruia mai i rangiatea. Celebrating you. We are all descendants from the divine universe. I celebrate in the uniqueness that is me, I celebrate in the uniqueness that is you. We use six pou to share the story of creation. In this first part of the wānanga we explore the intangible spaces of our pregnancies. We start with te kore – the growing consciousness and becoming aware of the pregnancy, acknowledging the past, affirming the present, the aspirations of the future. Hine kopū, our pregnant mums and whānau are affirmed in their mana and begin to understand the importance of taking care of themselves. Our second pou, te pō - the process of making informed decisions and the multiple dynamics of those decisions. Nga hine kopū, our hapū mums, will celebrate being hapū. And our third pou, te kōpipiri - awareness of the senses, self-care with the potential realisation and long-term impact on hapū māmā and pēpi. Our hine kopū will recognise the significance of parents and whānau in the growth and the development of our pēpi.

**Visual**

**The next slide appears. The screen is divided into three sections. Each section is split in half, the bottom half is a purple box with a heading of the next three pou. Above each box is a colourful representation of the pou. Raewyn speaks through them.**

Audio

Ka puta ora ia ngā hua. Every pregnancy is a new pregnancy. Take care of yourself and be present in the moment. This is the most important role you will have in your lifetime. This is your chance to help in the creation of a miracle. Our next three pou. Te Whei Ao. the transition from one space to another, from haputanga to birth, from the intangible to the tangible and the journey. Hine kopū will know how to prepare their tinana, hinengarau and wairua for birth. Te ao mārama - the time of celebration and reflection, reclaiming and incorporating Māori traditional birthing practices. Hine kopū will confidently take ownership of their tinana during birth and develop knowledge of traditional Māori birthing practices. Tihewa mauri ora - nurture and take care of taonga toku i hoa understanding the importance of te piringa poho the protective factors following the birth. Hine kopū and whānau will understand the significance of te piringa poho. These are our guiding pou that we use in our wānanga and the journey is told and retold in every wānanga as we share these pou with whānau. The conversations are reciprocal ones in which the whānau participate in exploring these pou and what they mean for them.

**Visual**

**The next screen appears. It shows the logo of Ngā Tātai Ihorangi** **which comprises of two interlocked spirals in shades of blue and purple.**

Audio

Ngā Wananga o Hine Kopū provides an opportunity to deliver antenatal knowledge in a Māori-centric framework. The approach draws on Matauranga Māori as the validation and infrastructure of the practice creating and empowering an incredible journey for whānau. Wānanga is about the sharing and collaboration of thoughts, ideas and traditional whānau birthing practices. Conversations with whānau are encouraged to discover their nurturing stories and to celebrate these rich traditions. At this time we celebrate all who have chosen to engage in wānanga and we treat our whānau like they are the taonga that they are. The wānanga itself is run over two days. It's an interactive space where we create a pou whenua, we decorate baby bodysuits, all while putting loving thoughts and aspirations into the mahi that we do. The recognition that women are cared for means whānau will thrive. Positive strength-based aspirational kōrero and empowerment. We have presenters that attend that will speak on different topics, safe sleep, healthy housing, smoke-free, and presenters are chosen for their ability to frame positive messages. The dream for the wānanga is that, and it is in the process across Northland, and that the wānanga will be owned by the communities that it is presented in. We have our pou tuarā team who are people in the local areas who champion and help facilitate these wānanga. Some of the feedback that we've received about the wānanga that we have held, many whānau speak of the safe spaces to share, all of the whānau enjoy that they can bring their partners, their grandparents, their friends along to participate in ngā wānanga with them. The story is the star and it resonates with the whānau. What we've found when we share the story of creation that this does resonate with whānau and they enjoy participating in the creation of actually their own story, their story of creation. Whānau feel like they belong in this space. They like that their tamariki are welcome and many say we need more wānanga like this. In 2020 we held 17 wānanga across Northland. We had three of our wānanga cancelled due to the COVID-19 experience. We had 107 hapū māmā attend our wānanga. Forty one of these were mums were on their first pregnancy, they're expecting their first baby. 66 were māmā who were expecting their second or ongoing other pregnancies from there. We had 27 whānau who came back to wānanga who had been to previous wānanga. 83 support people. We had 19 non-Māori hapū whānau attend and 88 Māori whānau attend. In 2020 we are having our programme evaluated and we're looking forward to those outcomes. So one of the things that we thought about with Te Wananga o Hine Kopū was how could we transfer the outcomes that we could see from the wānanga into the child health space. Ngā Tātai Ihorangi. Our intentional approach in equity response to improve the health for tamariki Māori. This was initially the first 2000 days programme and then it was rebranded as Ngā Tātai Ihorangi. Tātai is the te reo Māori used to arrange information into sequential order. It describes the relationship from one to another and is used to demonstrate the relational connection of components. Ihorangi are the finite details which make up the bigger picture and contributes to the whole. Ngā Wananga o Hine Kopū is a component of Ngā Tātai Ihorangi. So in the Ngā Tātai space we do a lot of work across the child health sector and working on improving our relationships with each other, service to service, and also working on areas where we haven't inspired whānau to come to our services. So we've changed things up. We don't have DNAs we have DNIs, failed to, we did not inspire, and we've changed the way that we manaaki. We talk a lot about how we host whānau in our services. If our whānau aren't coming, what is it that we are not getting right? The learnings gained in Nga Wananga o Hine Kopū contribute to the overall vision. Kia tupu ora ia ngā uri whakatipu. That the generations yet to come will grow and flourish, hapū māmā need to be nurtured and cared for as they are the keepers of the ira tangata. Investing in hapū māmā ensures the secure safe passage of the seed to the fulfillment of the dreams and aspirations of whānau.

**Visual**

**The next slide appears. It is blank white space with the words ‘Te wananga o Hine Kopū’ on the left.**

Audio

So what do we need to transform our learning spaces? Courage and commitment, the fusion of clinical and cultural practice is best practice. Having confidence that ngā mea Māori does make a difference, confidence in competence is essential. We know what our oranga looks like. Transformation must happen to improve Māori health. When you know better we must do better. And just to finish off I'd like to share this little waiata with you all. Kia ora.

**Visual**

**The next slide is a waiata, a music video. It starts with a group of women singing, then two men walking and singing. Different scenes of varying stages of family, pregnancy, whānau. It ends with pictures of birth and new pēpi.**

Audio

[Singing] Dear mothers this one's coming out to ya this will be the new buzz everybody show love and give it up for our mums are the future and nobody can take that away from ya. What should you do? Don't be scared to ask if you need some questions answered sometimes we need to better understand. No matter what you do know that your tūpuna chose you. Tāne we got to step the game up supporting our wāhine with some positive change, we gotta give to our women, we gotta love our women and our mothers and fathers, we gotta teach our women to be the best that they can possibly be, remembering whānau begins with whakapapa you see. All I see through their eyes and it's no surprise. Tihei mauri ora [sic], the essence alive. You are [sic], that's all you need. We can see into our future, through our children's eyes. See you are [sic], that's all you need. With the power of our people, we can make the change to take back our lives. This song is dedicated to every single lady, looking after babies [sic]. single or you're married, in relationships appreciation should be coming your way and that is it. Wahine toa, girls run the world yeah Beyonce said it, and if your boy ain't with it, better get him with it. They say your man loves a woman like he loves his ma and my heart is filled with love, thank you ma. I remember listening to Robert [sic] saying the biggest man that you ever did see, was once a baby and all our babies stem from my ladies. Baby girl if you're going through it now when there's doubt in your mind remember that giving birth is the gift of a lifetime. Gift heaven sent it's a gift and it's true, stand up, be proud yo we standing with you. You are a woman, that's all you need. We can see in to our future, through our children's eyes. You are a woman, that's all you need. And with the power of our people, we make the change to take back our lives. Cause you are a woman, that's all you need. Sing it again. You are a woman, that's all you need.

**Visual**

**The next slide appears, titled ‘Maternal mental health’. Underneath is the name Christine Mellor, Associate director of midwifery, Auckland DHB. The screen again shows the logos of the Commission in the top left and the PMMRC in the bottom left. A video box with John Tait is on the right.**

Audio

Kia ora Raewyn, what a fantastic presentation thank you so much. Our next presentation is on maternal mental health and that's being presented by Christine Mellor. Christine's a midwife at Auckland District Health Board. She works as an associate director of midwifery where a particular focus is supporting opportunities for psychological birth. She is also a doctor of health science student at AUT university and as part of her master's degree she undertook research exploring midwives' perspectives of maternal mental health and the assessment of maternal mental health during pregnancy. Christine.

**Visual**

**The next slide appears. It is a large grey square, within which is a white box with the words ‘Maternal mental health: Disparity between needs and services in primary care’. To the right of the grey square is a video box with Christine Mellor. She has blond hair and is wearing black.**

Audio

Hi everyone, I'm Christine Mellor. Thanks so much for giving me the opportunity to talk about this really important aspect of care. I'm a midwife, I've got a real interest in this area and I did some research for my Master of Health Science around midwives' perspectives of mental health and assessment during the antenatal period. So it's great to be involved in this webinar ‘doing things differently’.

**Visual**

**The next slide is a green square with two clouds at the top. In the middle is a drawing of a person from behind. He is wearing black trousers and a white shirt and is scratching his head. To his left is a signpost reading ‘Risk’. To his right is a signpost reading ‘Safe’. There are two question marks in the air above his head. The video box to the right of the screen shows the Commission logo.**

Audio

So it's really important to consider what constitutes risk in relation to maternal mental health, alongside assessment, screening and services that are provided in order to mitigate this risk. Are we getting it right? The evidence suggests that it's not just the more serious mental health needs that could represent risk for the woman and the baby. It's long been considered whether a woman's emotional wellbeing can impact on her pregnancy. We now have a body of evidence to suggest that it can, that there's a clear psychological, physiological link, and that ripple effects of psychosocial stress can extend well beyond the postnatal period.

**Visual**

**The next slide is divided into two halves. On the left is a grey square, within it is a box with the word ‘Background’ with writing below it. On the right is a black & white picture of a woman huddled in the corner of a room.**

Audio

Suicide is the leading cause of maternal death in New Zealand and particularly affects Māori. Māori women are over three times more likely than European women to die by suicide. For the period 2006 to 2018 suicide accounted for 30 deaths – that's 24 percent of the total – and almost half of these women, 41 percent, died by suicide during their pregnancy, and most of them died before 20 weeks’ gestation. Of the women that died, nearly half of them were known to be exposed to significant stressors and either engaged in self-harm or attempted suicide during their pregnancy. Maternal deaths by suicide in New Zealand are significantly higher than in the UK.

**Visual**

**The next slide is titled ‘background’. A bar graph is shown with the heading ‘Cause-specific maternal mortality ratios in New Zealand 2012-2018 and the UK 2012-2017’. On the left-hand side is data for New Zealand; on the right-hand side is data for the UK.**

Audio

We've got a figure here from the 14th report, the PMMRC 14th report, and it shows just left of the centre the maternal mortality ratios from suicide in New Zealand and in the UK. New Zealand's shown in red and the UK in grey. So as you can see it's a significant difference. Now the UK has reduced suicide rates by investing significant funding in both primary and secondary level services for improving maternal and perinatal mental health.

**Visual**

**The next slide appears. It is a grey square, at the top of it is a white oval with the word ‘Background’ in it. Underneath in a white box are three bullet points which Christine talks through.**

Audio

So back to New Zealand's. Barriers to accessing or engaging with care are the most common contributing factors to maternal death in the perinatal period, and inequities of care, access to care continue, remembering that Māori women are over three times more likely to die in the perinatal period by suicide. And the maternal mortality review working group has recommended that the Ministry of Health makes targeted investment in maternal mental health services a key priority.

**Visual**

**The next slide appears. It is a large grey box, on the right of the box is a black & white photo of Einstein. Across the photo is written the words ‘In the middle of difficulty lies opportunity.’ On the left of the photo is a small white rectangle with the word ‘Opportunity’ in it.**

Audio

Einstein reminds us that in the middle of difficulty lies opportunity and we know that we've got an opportunity here for improvement. Some of these maternal deaths by suicide may have been prevented with timely identification of risk and available and accessible services. This needs to be a priority. The Centre for Mental Health in the UK calculated that the costs incurred as a result of perinatal mental health problems in the UK are huge, and they equate to five times the cost of improving the services. They estimated that 28 percent of these costs relate to the mother and 72 percent to the child. And it was also recognised the potential impact of untreated perinatal mental health needs swell out even more extensively, for example partners employers, children being taken into care. So investing in the services is also cost effective.

**Visual**

**The next slide is a large white square beside which is a smaller black rectangle. Overlapping the two is a blue and white circle, in it is written ‘The Antenatal Period’. To the left of the circle are three bullet points which Christine talks through.**

Audio

The antenatal period is an important opportunity to reduce mortality and morbidity. Historically the main focus of maternal mental health assessment has been the postnatal period, but the importance of needs also being identified and supported antenatally is increasingly being recognised. Routine screening is recommended antenatally and postnatally. And this is important considering that rates of perinatal depression are actually highest during pregnancy. The Growing Up in New Zealand Study 2017 showed that 16.5 percent of the cohort of women, which was over five thousand, had significant symptoms of depression either at booking or at nine months postpartum, and more of these women met the criteria for depression antenatally. Also women with antenatal depression are more likely to also be depressed in the postnatal period.

**Visual**

**The screen** **stays the same but the three bullet points are replaced by three different ones.**

Audio

Antenatal stress, anxiety and depression are risk factors for preterm birth and also low birth weight infants, so it's not just the more serious mental health problems that represent a risk. Higher levels of antenatal psychosocial stress are associated with negative effects on the cognitive development of the child's, and they're also associated with childhood diseases such as infections, abdominal pain, mental health and behavioural problems. Some studies have found that high levels of antenatal psychosocial stress result in the child themselves being more likely to be depressed in adulthood. So this evidence really highlights some of the significant ripple effects if the woman's needs are not identified and are left unmet.

**Visual**

**The next slide appears, titled ‘Holding the problem-plugging the gap between women and the service’. Underneath are four key findings which Christine talks to. There is a grey circle to the right which has the title of Christine’s research paper in it.**

Audio

I conducted a research study as part of my Master of Health Science degree which explored how midwives perceived maternal mental health and how they assessed for risk antenatally. If routine screening was to be a recommendation it's important to understand how midwives feel in this space. And it was published in 2019. I've been asked to talk about some of the key findings so I'll briefly outline them. This was a qualitative descriptive study with 27 fantastic LMC midwife participants in the Auckland region. Five focus groups were conducted with midwives in their LMC groups, and the overarching statements is holding the problem, plugging the gap between women and the service. In a nutshell, midwives were left plugging the unfilled gap when they identified maternal mental health needs but could not access support for the woman if it was needed. The disparity related mostly to women with mild to moderate needs such as anxiety or mild or moderate depression, and I'm saying mild/moderate really loosely because I'm sure it doesn't feel mild or moderate to the woman but it's just how it's classified. There is evidently a gap here. These women did not meet the referral criteria for the DHB mental health service and primary services are often lacking. Midwives were then left carrying this weight. In contrast, midwives found that when women had more serious mental health needs they were able to access services, and as their needs were then met this had less impact on the midwife. The midwives absolutely acknowledged their pivotal role in identifying mental health needs but felt that the current service availability was not actually meeting the needs of all women, particularly in the primary space, nor was it meeting the needs of the midwives. The research results showed that when women who had symptoms of anxiety could not access appropriate services, this equated to a greater workload, stress and pressure for the midwives. For example, longer appointments were needed, lots of emotional support and reassurance and women sending lots of texts with their concerns at all times of the day and night. And although a degree of anxiety is normal, the midwives felt that the prevalence of heightened anxiety symptoms was really high, in fact they were really concerned that actually this could become normalised because it was so prevalent. They found it difficult at times to identify the point at which it constituted risk for the woman and the baby.

**Visual**

**The next slide appears. On the left is a grey square, within is a white box with the words ’Identifying needs in the absence of appropriate services’. On the right is a white square, within is a drawing of a sitting woman in a black dress. She has a small open box in front of her, a stream of blue ‘emotions’ flows up from it.**

Audio

So identifying needs in the absence of appropriate services, because things would be very different if there were appropriate services. Results showed that the midwives did some form of ongoing inquiry about the woman's mental health, but screening using a tool at this time was not routinely done during the antenatal period. The Edinburgh postnatal depression scale was used more to validate midwives concerns when they were making a referral. The midwives felt that maternal mental health screening was not purposeful in the absence of available services. Without this provision midwives knew that once a concern was identified it would equate to additional responsibility and stress for the midwife. The lack of services could be a barrier to effective screening. It needs to be efficacious and feel purposeful.

**Visual**

**The next slide appears. On the left of the screen is a grey square, at the top of this is a white box with the words ‘Safeguarding the woman’s wellbeing in the absence of appropriate services’. Under the box are four statements which Christine talks to. On the right of the screen is a white box, in this is a picture of a man walking on a tightrope while holding an umbrella. There are birds in the sky above him, and swans flying in front of him and behind him, holding the tightrope.**

Audio

In spite of sometimes identifying needs and being unable to access services, the midwives need to continue to keep the woman safe. They then felt that they were left carrying the weight of the woman's mental health needs without a safety net and this weight could feel really heavy. They felt an additional responsibility beyond their medifree obligations and worried about poor outcomes when they had to plug this gap between women and service. They also felt that the trusting relationship between the midwife and the woman could be friend and foe, because it facilitated effective mental health assessment but then also intensified the woman's expectations of support from the midwife. Sometimes maternal mental health needs, particularly anxiety, represented a variable for midwifery decision-making, and this was usually with midwives arranging additional assessments, screening and intervention that may not have been clinically indicated, but it was purely to satisfy the woman's increased need for reassurance due to the anxiety.

**Visual**

**The next slide appears. This is a large grey box. In it on the right is a white box with the words ‘Breaching of boundaries’. To the left of this is a black & white photograph of a snow-covered field. Beyond the fenceposts and barbed wire are two sets of prints, coming from opposite directions and crossing in the middle. There are hills in the background.**

Audio

Midwifery boundaries were sometimes breached in order to keep the woman safe when appropriate services were not available. The midwives did not want to step over that fence, they're not mental health professionals, they wanted the woman's mental health needs to be met by services.

**Visual**

**The next slide appears and is a large white box. On the left side of the box is a list of bullet points which Christine talks through. On the right of the box in a large grey circle with the words ‘Key Messages’ inside.**

Audio

Here are some key messages. Untreated and unsupported maternal mental health needs equate to risk. Maternal mental health needs are not always recognised. We need universal routine antenatal and postnatal screening and clear referral pathways to guide routine screening and referral to services. All DHB's should now have maternal mental health referral pathways in place. Mental health needs to be normalised and integrated and synthesised into routine antenatal and postnatal care, it shouldn't be a separate entity. Assessment and screening needs to be understood by practitioners to be meaningful and efficacious by resulting in access to services if this is needed.

**Visual**

**The bullet points are replaced by another three, which Christine talks through.**

Audio

Services must be available, accessible and equitable to meet the needs of all women, including those with anxiety and mild or moderate depression. Maternal mental health teams should take direct referrals from midwives and this currently doesn't happen in all DHBs. And there's an urgent need for investment in maternal and infant mental health in New Zealand. The ripple effects of unmet needs are extensive and they could be intergenerational.

**Visual**

**The next slide is a white box with a drawing of a bird in it. The bird has a speech bubble coming from its beak with a love heart in it. Below the bird are the words ‘Maternal mental health, it matters.’**

Audio

Maternal mental health, it really matters, and it sits centrally to the health and wellbeing of the woman, her baby and the family.

**Visual**

**The next slide has the words ‘Thank you’ with a leaf frond rising up beside it.**

Audio

Thank you so much for listening.

**Visual**

**The next slide appears. It is titled ‘Neonatal encephalopathy’, under this is the name Dr Robin Cronin, PMMRC and Neonatal Encephalopathy Working Group member’. The Commission logo is back in the top left corner and the PMMRC logo is back in the left bottom corner. A video box with John Tait is on the right.**

Audio

Thank you, thank you Christine for a very provocative and meaningful talk. The second talk – the next talk is on neonatal encephalopathy and that's going to be presented by Robin Cronin. Robin is a midwife who works both clinically and in the research midwife specialist role at Middlemore Hospital. She has a PhD from the University of Auckland on modifiable risk factors for late stillbirth and she has been part of PMMRC since 2017 and also sits as a member on the neonatal encephalopathy working group since 2018, providing a key link between PMMRC and the neonatal encephalopathy working group. Robin.

**Visual**

**The next slide is titled Neonatal Encephalopathy, under which is written in red Recognise, Communicate and Cool. The Commission logo is in black & white in the bottom left corner, the PMMRC is on the right bottom corner, and the background is a white koru on grey. On the right is a video box showing Robin, she has blond hair and is wearing glasses and a head microphone.**

Audio

Hi I'm Robin Cronin, I'm a research midwife specialist and clinical midwife at Counties Manukau Health, and over the next 10 minutes I'm going to be talking about neonatal encephalopathy, focusing on recognition, communication and cooling which I hope will make sense by the end of this presentation.

**Visual**

**The next slide appears. It is titled ‘Definition of NE’ and underneath is the definition. In the top right of the screen is a grey circle, within this is the PMMRC logo. This appears in the following slides. Under this is a drawing of a stylised brain with white branches in it.**

Audio

Now, neonatal encephalopathy or NE is a syndrome of disturbed brain function in the first week after birth in the term or near-term baby, and these babies have difficulty establishing and maintaining breathing, poor tone and reflexes, reduced consciousness and often seizures. Now NE is an umbrella term used in preference to hypoxic ischaemic encephalopathy or birth asphyxia, because it's now recognised that acute and chronic causes are often in combination, such as fetal distress in labour with a small for gestational age baby.

**Visual**

**The next slide is headed ‘Why is NE a problem’. Under this is a jumble of differently coloured words, which are all complications arising from NE. On the right is written ‘Severe NE’ with bullet points below.**

Audio

And the main cause of NE is decreased blood flow in oxygen to the baby's brain, and of babies with severe NE at least 60 percent will die and at least 25 percent of survivors will have lifelong complications from brain injury, including cerebral palsy, intellectual disability, blindness and hearing deficits, and epilepsy.

**Visual**

**The next slide appears. It is headed ‘NE Severity’ and underneath is a table titled ‘Sarnat score’. The table has a column on the left in a brown box stating the symptoms, and on the right are three columns titled ‘mild’, ‘moderate’ and ‘severe’.**

Audio

Now the severity of NE is measured using the simplified Sarnat criteria, and that's a tool to assess NE when there are predisposing risk factors. Now I'm not going to be quizzing you on this at the end, but it's helpful to know about it.

**Visual**

**The screen stays the same, but a red box appears around the mild column. Robin talks through the information in the column.**

Audio

So mild NE are those hyper-alert babies, and it was previously thought these babies recovered within 24 hours. But recent evidence is that infants with mild NE have worse neurodevelopmental outcomes compared to those without.

**Visual**

**The screen stays the same but the red box disappears and reappears around the moderate column. Robin talks through the information in the column.**

Audio

In moderate NE, if left untreated only 50 percent of these babies will be neurologically normal at discharge on physical examination in MRI.

**Visual**

**The screen stays the same, but a red box disappears and reappears around the severe column. Robin talks through the information in the column.** Audio

In severe NE up to 60 percent will die, and of the survivors only 16 percent will be neurologically normal at discharge. Now even the most unobservant midwife or doctor are unlikely to miss the comatose, flaccid baby with severe NE but it can be more challenging to recognise babies with mild or especially with moderate NE.

**Visual**

**The next slide is headed ‘Number of NZ babies with NE’. On the bottom right is a photograph of a woman holding a baby. The baby is new born and is lying on the mother’s chest, covered with a sheet.**

Audio

Now data collected by the PMMRC shows that the current New Zealand rate of moderate to severe NE is 1.2 babies per 1000 live births and that's comparable to other similar high-income countries. And that actually doesn't sound much but between 2010 and 2018 620 babies were born in New Zealand and that's around 67 babies per year that were diagnosed with moderate or severe NE.

**Visual**

**The next slide appears. On it is a line graph titled ‘NE annual and three-year rolling rates 2010-2018. The left axis is labelled ‘NE rates/1,000 term births’, the bottom axis is labelled with years from 2010 to 2018.**

Audio

And the rates haven't changed significantly in the past eight years. But you can see there is an encouragingly downward trend and it looks like we're starting to make a difference.

**Visual**

**The next slide appears, titled ‘Antenatal risk factors for NE’. Underneath is a list of bullet points which Robin reads through. On the right of the list is a photograph of the midsection of a pregnant woman from the side. She is wearing a white singlet, pulled up to show her stomach. Her arm rests on top of her baby bump.**

Audio

Now antenatal risk factors for NE are your usual suspects including obesity, with rates of NE in New Zealand significantly higher in babies of women with BMI at or over 35. And small for gestational age babies are nearly twice as likely to be diagnosed with moderate and severe NE compared to appropriate for gestational age babies, and therefore the reason for ACC funding the roll out of the Growth Assessment Protocol or GAP in our district health boards. And there are significantly higher rates of NE for primips compared to multips.

**Visual**

**The next slide appears, titled ‘Intrapartum risk factors for NE’ Underneath is a list of bullet points that Robin refers to. On the right is a drawing of a baby in the womb.**

Audio

Now labour and birth risk factors, or the things that keep me awake at night after a shift in birthing, are the sentinel events in a previously healthy baby resulting in birth asphyxia. And that can be seen in approximately one quarter of babies with NE in New Zealand in the past eight years of data collection, including abruption, shoulder dystocia, cord prolapse, breech, uterine rupture, and other causes including infection and our old nemesis, the ominous CTG.

**Visual**

**The next slide appears, titled ‘CTG and NE’. On the right is a photo of a printout from a CTG (Cardiotocography) machine.**

Audio

However, we also know that an abnormal CTG has a high false positive rate and the vast majority of babies born after an abnormal CTG are just fine. And a New Zealand 2020 study of CTGs from 35 babies with NE and 105 healthy babies reported that obstetricians and midwives, who were not told which CTGs belonged to which babies, detected three quarters of babies with NE based on their CTG and recommended immediate action or delivery for more than 40 percent, which is good news. But it also means that some babies with birth asphyxia who developed NE went undetected. So the message is, even if the fetal heart or the CTG appears reassuring in labour, please stay alert for signs of NE in all babies.

**Visual**

**The next slide appears, titled ’Resuscitation, Apgar score, blood gases’ and has three bullet points under it, which Robin refers to. On the right in a box is a flow diagram of Newborn Life Support.**

Audio

Now the good news is that we do have additional ways of recognising babies at risk of developing NE. Of the babies with moderate and severe NE in New Zealand since 2010 we know that the majority required resuscitation at birth, ranging from oxygen to cardiac massage and adrenaline. Most had poor Apgar scores at one minute and 77 percent had an Apgar below seven at five minutes, and nearly two-thirds had abnormal blood gases. And it's important to note that 15 percent of babies with NE had normal blood gases, and recent evidence is that if the cord is compressed, for example with shoulder dystocia, cord gases may be falsely reassuring, because they show the baby's condition before cord compression, so that's an important thing to remember.

**Visual**

**The next slide appears, titled ‘Newborn Observation Chart – NEWS’. Under this is a large blue square with Newborn Observation Chart written in it, at the top right of the square is a darker blue box with the ACC logo. On the right side of the screen is a white box, within is a picture of the NEWS chart. As Robin talks, a black rectangle appears in the blue square, showing the details she is talking about.**

Audio

Now the Newborn Observation Chart or newborn early warning score also supports recognition of NE. A 2018 audit showed that more than 40 per cent of babies with foetal distress in labour had a NEWS score of two or more postnatally. So please, do the NEWS.

**Visual**

**The next window appears, headed ‘Cooling (therapeutic hypothermia), under this is written ‘6 hour window of opportunity’. Robin talks through the information below. There is a photo on the right of a baby in hospital, with ventilation and other tubes attached to its body.**

Audio

Now, whole body cooling of the baby is the only available treatment for NE. And the reason we cool babies with NE is because of the protective effects of cooling, which include that less babies with NE die or survive with major disability if they are cooled, less survive with cerebral palsy and cooled babies with NE have improved cognitive and motor outcomes. But to be effective, cooling must commence within six hours of birth. The six-hour window of opportunity, and the photo is of baby Sarah on her first day of life. She's undergoing passive cooling for NE. She's naked under the radiant warmer but with the heater off, to keep her rectal temperature between 34 and 33 degrees for 72 hours.

**Visual**

**The next window appears. A large red rectangle is at the top, written in it ‘1) Recognise’ Underneath is a list of bullet points. To the right is a photo of a placenta or umbilical cord.**

Audio

However, we also know that identifying a baby with NE is not always easy, but the good news is that midwives are well placed to recognise the signs of NE because a midwife is present at every birth. And what we can do is first recognise the baby who was at risk of NE, which is any baby that is stunned or flat at birth requiring resuscitation, especially prolonged resuscitation, low Apgar scores and a baby that is not behaving in the expected way. This baby might be hyper-alert or lethargic, with normal or poor tone or a weak or absent suck. So please take cord gases and lactate wherever possible and consider sending the placenta to histology so they can assess for infection, placental abnormalities and malperfusion.

**Visual**

**The next slide appears. A the top is a large brown rectangle, within is written ‘2) Communicate’. Below is a list of bullet points which Robin refers to. On the right is a picture of two health care workers at an office desk, with their backs turned. One is on the phone and the other is looking at something.**

Audio

The second thing we can do as midwives is communicate with a colleague or a senior member of staff, and escalate and refer as soon as possible to a neonatal nurse practitioner or neonatal doctor at a tertiary hospital, using a tool like my old friend the SBAR – situation, background, assessment, recommendation, so that the person you are phoning understands why you are concerned and what you are asking them to do.

**Visual**

**The next slide appears. At the top is a large black rectangle, in it is written ‘3) Cool’. Under that in red capitals is ‘Don’t Delay’. Robin speaks through the information below. On the right is a picture of the same baby as before, lying on her stomach, with no tubes attached.**

Audio

The third thing we can do is cool the baby if or when we are advised. Don't delay. Optimum cooling to reduce brain damage starts within six hours of birth. Our aim is to increase the proportion of babies with NE who are recognised, referred and cooled so that we have more babies like Sarah, who had no signs of brain injury when she was discharged home with her family.

So please remember, recognise, communicate and cool. You can make a difference. Thank you very much.

**Visual**

**The next screen is a woman introducing a video. The woman is in an office, she has short blond hair, is wearing a pink top and has glasses.**

Audio

This scenario is to highlight the elements of Robin Cronin's presentation on how to recognise neonatal encephalopathy. It's a discussion between a shift coordinator on a tertiary unit and an LMC midwife.

**Visual**

**The video is of two women conferring about a newborn baby. The coordinator has brown hair, glasses and a white top, the midwife is in a pink top.**

Audio

Juliet have you got a minute? I have, come on in Julie. Yes I'd just like to talk something through and get your advice. What are you doing you've been here all night? Yeah. You'll be ready to go home? Yeah I'll get ready to go home yup, and the baby's been born but I just have a few concerns about the baby. So 37 weeks and born after, you know, not a long labor meconium liquor from fetal distress so born by ventouse. Yeah and the baby's coming up two hours old now and I'm just a bit concerned about the tone. Right what were the Apgars? So Apgars were 4, 7 and 9, and so the baby made a reasonable response, needed resuscitation and so ventilation and sleep was kind of a sluggish response. I've got there the neonatal nurse practitioner was there, she also assessed the baby and the plan is for the neonatal team to do an assessment later today. So they do lactates? Yep but unfortunately it was a very skinny cord and we couldn't get any cord blood so they haven't been done and the baby's smaller than we expected, eighth percentile, so we certainly tried feeding the baby, looked like it could be interested in feeding, went to the breasts but just not sucking so we've expressed some breast milk, given the colostrum and blood sugar following that is only just in normal range. You're saying the tone is not good? Yeah that's, I just feel like the tone is getting worse if not better. So I've done a NEWS so the NEWS is 2 because the tone is poor and if I add in the feeding it's 3. Right. I just don't want to escalate this unnecessarily, everything else about the baby looks okay but – and the parents have had a really you know it's been a difficult time adjusting to what's happened – I know the neonatal is really busy like there's been a couple of sets of twins born today and so I know there's a lot going on there. Yeah I don't think your concern is unwarranted, I mean I think this baby is what two hours old, is definitely sounds like its tone is not as good, the NEWS isn't good, yeah we don't have a lactate to work on. Yeah. There's, I mean everything in this picture indicates that this baby needs to be seen by the neonatal team again. I mean we need to think about whether they want to introduce cooling which is, you know, within a certain time frame. Time is of the essence really so certainly I'd be recommending that you make contact with the neonatal team again and get them to come and review this baby as soon as possible. Great yeah okay, thank you, that was my thought and yeah so that's – I'll give the registrar – Yeah I'll do that now. Great I'm just gonna head off to handover I'll leave you in my office. Wonderful thank you.

**Visual**

**The coordinator leaves and Julie (the nurse) talks on the phone to a registrar.**

Audio

Is that the neonatal registrar? Hi it's Julie Richards here, LMC midwife. I'm in room three on the birthing unit. The situation I have is that I have a baby in my care who I'm concerned about. He's 37 weeks with increasing poor tone and not sucking. He's on the eighth percentile and he's got a NEWS of 3. His background is that he was born via ventouse following fetal distress with meconium liquor. Apgars 4, 7 and 9, medium resuscitation with ventilation and CPAP at birth. My assessment is that he may be developing NE and I would really appreciate an urgent assessment of him. Is that possible? Great all right I'll see you soon, thank you.

**Visual**

**The next slide appears. The heading is ‘National bereavement care pathway’. Underneath are the names of the two speakers, Lisa Paraku, PMMRC member, and Dr Vicki Culling, Perinatal and infant loss educator. The Commission logo is back in the top left corner and the PMMRC logo is in the bottom left corner. John Tait is in a video box on the right of the screen.**

Audio

Thank you Robin and your team for another very educational presentation. Our final presentation is going to be on the national bereavement care pathway. Lisa Paraku and Vicki Culling are doing the presentation. Lisa's been a member of PMMRC since 2017 and she stands on behalf of bereaved families and whānau to bring a voice to spaces that are typically data driven. Lisa is a friend of SANDS, a peer-to-peer bereaved parent support network. Her daughter Jasmine Lee brings along with her five siblings who did not enter the world of light, bringing her to this important work. Vicki is a bereaved parent experiencing the stillbirth of her first daughter over 20 years ago. She's been actively involved in SANDS New Zealand for over 17 years and she was a committee member of PMMRC from 2005 to 2011, and she is currently vice chair of the national perinatal pathology service clinical network. Thank you Lisa and Vicki.

**Visual**

**The next slide appears. In the centre of the screen is a love heart made of pounamu, on a thong. To the left of the heart is a karakia in Māori, to the right of the heart is the karakia in English. On the far right of the screen are two video boxes. The top is Vicki, she has blond hair and is wearing a navy blue top, and is in a living room. The bottom video is Lisa, she has dark hair and is wearing a grey and blue top, and headphones.**

Audio

Kia ora. Denis Grennell has opened our webinar with karakia, Lisa and I would also like to offer this karakia as bereaved māmā thinking about our babies and all of the babies that the PMMRC acknowledges. Kia hoki ngā whakaaro ki a rātou, kua whetūrangitia, okioki atu koutou, moe mai rā. Tātou, ngā whaihotanga o rātou mā, ngā mihi nui. Kia ora Vikki, kia ora tātou. He whakapa ki a tēnei. May we remember those who have passed away and wish them well on their journey. For those of us here today, e mihi ana ki a koutou. Greetings to you all. Kia ora. Ko Vicki Culling tāku ingoa No Ōteputi ahau Kei te Porirua ahau e noho ana Ko Manuherikia tōku whenua Taurikura. So greetings my name is Vicki Culling, I hail from Te Wai Pounamu, the South Island, I am a mainlander and I live in Porirua, Wellington region and I am a trainer and educator in the area of perinatal and infant loss. Kia ora. Āe ra. E aku nui e kura he tēnā rā, koutou kātoa. Special greetings to you all. Ko wai au? Who am I? E te tau tāku māmā he uri au no Irana. My māmā is from Ireland. E te tau tāku pāpā he uri au no Pare Hauraki. My father hails from the beautiful Coromandel. Ko Lisa Parekau tōku ingoa. My daughter Jasmine brings me here today, she was born beautiful and still in 2006 and she rests with her tūpuna of Ngāti Tūwharetoa. Her five siblings also didn't enter the world of light and so I do this mahi for them and I do this mahi for my two boys who did. Kia ora rā. Kia ora, Lisa.

**Visual**

**The next slide appears. The background is a picture of a wooden footpath leading through tussock grass. There is a river, and snow-covered mountains. In the middle is written ‘Imagining a Perinatal Bereavement Pathway in Aotearoa New Zealand’. Underneath is written Lisa Paraku and Vicki Culling, PMMRC webinar 23 February 2021.**

Audio

So in 2019 the PMMRC made a recommendation that the Ministry of Health should resource, support and facilitate the development of a national perinatal bereavement pathway, with key stakeholders, including governmental and non-governmental organisations, to ensure high quality, appropriate and equitable care for all. And in this brief kōrero today we want to imagine what a national perinatal bereavement pathway might look like. Hmm. Āe rā. So, I sit on the PMMRC. I think I'm a consumer advocate, I think that's the title. And so I sit here on behalf of the experience that me and my whānau have had with the system and also Vicki and I are lucky enough to have sat with and been part of kōrero amongst bereaved parents. So when we have lost our precious babies we have experienced quite variable levels of care, so out of that and also what the data's showing us came this recommendation. We've had lots of kōrero about this, hey Vicki, about what it might look like. In 2017 we were doing some mahi around autopsy and post-mortem for families and whānau, and at that time we asked the local coordinators up and down the motu within DHB. We sent out a survey and in that survey we were just asking about the levels of care that are provided for our families and whānau, for our bereaved families and whānau at that time, and what came back was variable and in my experience, you know with my six pēpi, it has been variable. Variable based on where we are, where we live, variable based on its applicability to the way we live, so there's lots of variation in the care. That's not to say that our health professionals don't do the best that they can because none of us come to this mahi wanting to do anything less than an optimal job, engari. We don't know everything so we do the best that we can within the resources that we have in our area at the time and that showed up in the survey. So what was on offer for our families and whānau, and I think Vicki you might want to talk to the kōrero that we have nationally with SANDS and maybe share some views on that before we get into specifics. Yeah, and another source of data is a survey that SANDS New Zealand did in 2019 when Internal Affairs were setting up the excellent website Wheturangitia with information for bereaved parents, families and whānau, and so SANDS New Zealand surveyed bereaved parents around the country asking what sort of support they got and what support they would have liked, and that painted a picture of really variable and very different levels of support and information for families. And while we didn't identify who answered the survey some talked about whether they were rural or urban and what part of the country they were in and it was it was eye-opening and it was really upsetting actually to think that depending on where you live dictates whether or not you have people looking after you who are confident and informed and know, have had the training and whether there's a support group or a non-profit group in your area that provides things, memory items to the hospital, so when we talk at a national level on our online meetings, some people will talk about the wonderful things they got and the wonderful care they had and others, well you can see it in their faces, like oh I oh, that's whereabouts were you, I didn't, that was never offered to me, and so this whole idea of a national bereavement or perinatal bereavement care pathway isn't about necessarily offering the same thing to everyone all the time but it's ensuring that we care enough about our parents around the country to offer at least some minimum. I have some minimum standards that we can achieve and in a country this size, Lisa and I are pretty confident that it's something we can do. Yeah so some of the things that we've spoken of, and we spoke of at that time too, were the things that could be put in place, that would really help, that would really help us in our most you know, raw time of grief, and I guess from my perspective culturally there were a few things that need improvement I guess and it would be wonderful if we could have similar you know, guidelines and a framework that was offered up and down the motu so there is access to the same things. That would be wonderful as a start. And then as communities and personally what we individually need whilst we're in our grief but when we are in that raw place with our precious babies and our whānau and families that could make it a little more gentle for us during that time and I know in my culture we call that whānau pani, it's called that. You know all of the aroha is faced towards those who are in that raw, raw grief at the time. That really helped so I'd really love if we could standardise a pathway because we don't seem to have any pathway. So maybe you know at a really high level make that available to everyone so it's not based on where we live or you know if we just happen to be in the right place where we have people like SANDS and baby loss groups and volunteers who come in and we're lucky because we have them and the information, but actually that is available up and down the motu to our families and whānau at the time.

That would be really lovely and I guess to give you examples of some of the things culturally, you know in my culture there's a real difference between tapu and noa, and those spaces are really quite different and not everywhere can we have the ability to keep safe in the tapu space where we have a matea, we have a loss and we're not in the same space as that beautiful noa, where we also have celebration over here for new life that is coming in so. And I don't think that is the same up and down, so a place for us to karakia, a place for us to mourn and grieve, all of these things these are examples of things we can consider within the tapu noa. I had experiences like my baby being referred to as products of conception so changing our language, yes it's technically true but, that's my baby and actually right from conception and that's just my personal experience because others have a different experience but my personal one was right from conception, that was my baby. And so when we refer to my baby as products of conception to be picked up in an orderly office whilst they're eating their lunch, which was just one of my many experiences, that tapu noa is not catered for and we're unsafe in it. So I guess from my perspective a standard bereavement care pathway would make allowances for families to be able to choose the level of support and care that they have during that time. So that's what I'm excited about anyway. Kia ora Vicki. And it would offer staff, our professionals some, you know, safety and confidence as well so our goal in this is not just focused on our bereaved whānau it's actually the whole, everyone involved in this work. And I just want to talk about somewhere where it's already happening and that's in the UK.

**Visual**

**The next slide appears. There is a picture of a green tree this is the agency’s logo. Underneath is written ‘national bereavement care pathway for pregnancy and baby loss’, under that is the web address for the agency.**

Audio

So in 2017 the UK developed and launched the national bereavement care pathway for pregnancy and baby loss, and the impetus was to increase the quality of and reduce the inequity of bereavement care. So they have a set of nine bereavement care standards that they have developed in conjunction with professionals and baby loss organisations, so they're standards or guidelines that guide everyone working in that area and then they have five pathways that cover miscarriage, and that includes molar and ectopic pregnancy, termination of pregnancy for fetal abnormality, stillbirth, neonatal death and SUDI, or sudden unexpected death of an infant. And it was funded by their Department of Health and Social Care and backed by an all-party parliamentary group on baby loss so there's a lot been happening in the UK over the last 10 years, and the pathway project was led by SANDS UK in close association with other charities. Now the UK has a population of 68 million so they were able of course they were able to do this because of 68 million they've got their higher population, higher funding, but there's a lot of people we've only got 5 million we really feel like this is something we could achieve, and we offer this UK example as that, as an example, not as a template but as an example that we can look to and go okay, here's an idea of what someone else has done.

**Visual**

**The next slide appears. On it is a map of New Zealand, with a grey rectangle showing the name of each DHB.**

Audio

And I guess we also bring it back to where we are in New Zealand Aotearoa. I think I mentioned you know the whānau pani model and there are lots of really key indigenous models that could be applied if we were looking at a standard bereavement care pathway. So I guess what we are laying down as a wero, as a challenge, we're acknowledging the fantastic work of our health professionals so our individuals engari, we're also acknowledging that our system at the moment and how we set up is not, it's not optimal really, it's not where we need it to be so that we can have that gentle journey in a club really that no parent ever wants to be part of. So as 2 bereaved māmā of beautiful babies the wero is out to you all and to the system to clear a path for standard care. Actually to really value what is already out there in a volunteer sense actually, so we have people ourselves included who are doing this mahi and this mahi is important mahi and really needs to be supported properly and valued properly, and if we're going to do that then we need to do it up and down the motu, it needs to be co-lead, we need to have an eye on our commitment to the Treaty and Te Tiriti, so we take the frameworks and what has worked overseas and we bring it home and we talk to home and what works here in Aotearoa New Zealand for us and our people, and we value that within the wider ecosystem for our families and whānau who don't ever want to be here. No reira. Āe rā, tēnā koutou kātoa. Vicki, over to you. Yeah thanks Lisa and I just want to acknowledge that we have a heavy reliance throughout Aotearoa New Zealand on non-profit voluntary organisations, one in particular SANDS New Zealand and another smaller one, Baby Loss New Zealand and like Lisa was saying it's how much do we value this work and what's being done and just because something's been around for a long time doesn't mean that we just expect it to continue, we need to actually put something in place where we say this is important work and there is value in it and we do something and that something might look like. I've been thinking about this for a long time so I've got some ideas about what it might look like. You know there's some training for staff so they're confident and knowledgeable, there's really clear models, there's cultural safety in there, there's perhaps some minimum memory items like a memory book and hand and footprints. It's all up for consultation and kōrero with everyone throughout the country but it feels doable and like Lisa said the wero is there to our Government, to the people who are making those decisions, to step forward and acknowledge these whānau and acknowledge the experience that they're having, their precious pēpi who have died. Just finally, included in that wero, if we put this in place, if we do have a national bereavement pathway, bereavement care pathway, then as Vicki says it is about training, it's actually about filling our cups and adding to our kete so that we can, I think I say this over and over, because I know it and I feel it we can make this journey for our whānau for our families the most gentle journey that it can be, couched in aroha, because actually that's where it's at, so the whole bereavement care pathway, the national bereavement care pathway, just couched in aroha for a community that no parent ever wants to be part of but that we sometimes must. So we will assist in filling that cup and filling that kete with the knowledge and we will wrap around our whānau and families with aroha. That is the wero, that is the tono, that is the request, that is the plea. Tēnā koutou, tēnā koutou, tēnā rā koutou kātoa.

**Visual**

**The next slide appears. Written on the screen is a karakia, under which is a picture of a red heart.**

Audio

So our kōrero has completed and finished so we want to finish or close now with the karakia. Ngā mea karakia tātou. Unuhia, unuhia, unuhia ki te uru tapu nui. Kia wātea, kia māmā, te ngākau, te tinana, te wairua i te ara takatā. Koia rā e rongo whakaria ake ki runga Kia tina! Tina! Hui e! Tāiki e! Kia ora.

**Visual**

**The next slide appears. It is titled ‘Thanks and closing thoughts’, with Mr John Tait written underneath. The Commission logo is in the top left corner and the PMMRC is in the bottom left corner. These stay on the following screen. A video box appears on the right side, showing John Tait.**

Audio

Thank you. Thank you, Vicki and Lisa, and thank you for the fantastic work and advocacy you do for bereaved parents. With regard to question and answer, we've run out of a wee bit of time, we've had a couple of offline questions which we will endeavour to answer offline. Thank you very much for all our speakers, this has been a different way of doing it and in fact the whole report has been a different way of doing it so we would be very interested in any feedback from the participants. And thank you to the participants for making the time to come to this webinar and we really do hope that you take up the wero and the challenge. Thank you.

**Visual**

**The next slide appears. It is titled ‘Karakia’ under that is the name Denis Grennell. He appears in a video box on the right side. Denis is wearing a blue shirt, glasses and a headphone.**

Audio

Kia ora tātou. Te mea tuatahi ki a mihi atu ki a koutou a ngā kai whakaata. I just want to acknowledge the presenters and all that really juicy information from a number of perspectives and angles. I really want to acknowledge all the participants but especially like others really want to acknowledge the whaea, the mothers, ngā tāngata, ngā whare tāngata ingā pēpi ngā taonga tōku iho mai inga tua especially those that we've lost. I'd like to just pull out a couple of things. I think it's fantastic that there has been a decrease in Pākehā mothers and babies being lost. It is however really unacceptable that there hasn't been a similar decrease for Māori, Pacifica, Indian and other minority groups. In terms of Māori, in terms of self-harm, mental health and the other medical misadventures that were brought up, these are all linked across the system. The high suicide rate in Aotearoa especially among young Māori women and young Māori men. The high use of the mental health systems across the country. So this is a real need for a whole system approach to this. There's been lots of wero or challenges put out by the various speakers and presenters and maybe this is also one for ourselves at the Commission, to look more holistically across the whole of the systems, across all of the committees, rather than continue to work it as a siloed approach. There have been a number of speakers that have spoken about tāpu and noa, have spoken about whare tāngata, ngā pēpi taonga tuku ihoa, about Te Tiriti and about aroha. These, especially in terms of whakapapa, is absolutely, or genealogy, is absolutely core to the Māori world, it's the way that we explain the world that we're in, that is why we have genealogical tables that exist from the omni-present being or the beginning of all, right down to our present generation. This continued loss of our babies and our mothers can be seen from one perspective as a concerted, continued attack upon Māori and the core of who we are. I absolutely support Lisa with the focus on aroha and Te Tiriti. So just want to thank everybody that's been involved in this and that's complete with karakia because this work is tapu. We are dealing with people, and people are from the divine. No reira mea no tātou, let's close with a karakia. No reira kia tau, ki a tātou katoa. Te atawhai o te tātou Ariki, i Ihu Karaiti. Me te aroha, o te Atua me te whiwhingatahitanga Ki te wairua tapu. Ake, ake, ake, amine. Kia ora tātou.

**Visual**

**The final slide appears. It says ‘Thank you for joining us’. Underneath is written ‘Kia pai tō rā!’**