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Stagnant or Increasing Infant Mortality:

The MCH Director's Role in Responding

DELIANA FUDDY: Good morning. I'm a little shorter, so, I have to reduce the mic here. Well, the room has filled up. When we first came in, there was just a handful of people, and now it's nicely filled up. So I'm going to tell you a little bit about Hawaii, and kind of the role that the MCH Director has played in all of this, and I'm going to give you a little bit of information about the data analysis as well. But I'm going to kind of skip through that to get to the role that we played in the division to move forward on this. Oops. What happened? This looks like it went all the way to the end.

UNKNOWN SPEAKER: All the way to the end?

DELIANA FUDDY: Yeah.

UNKNOWN SPEAKER: Has there been a problem?

DELIANA FUDDY: No, wait, yeah. There you go. I just moved one. Okay, basically, we all were in this together, looking at the reasons why our infant

mortality rate has gone up. And, one of the key roles is, of course, pulling together the team to look at this. So that was one of the areas that basically, the MCH Director and myself kind of took charge, is to say, who do we formulate this team? And that it is a collaborative effort. Like many of the states that got involved with this, we were resource poor. There was nothing dedicated to this area. So we needed to pull together partners who either had access to data, had some resources to analyze that data, and had a level of expertise that can help guide the questioning that we needed to do to further analyze what we were trying to determine, why our rates were going up. And let's see if I can get, here we go. So basically, we looked not only to the Department of Health, but we brought in the University of Hawaii, School of Medicine, March of Dimes, School of Nursing, and Copulani, which is our only tertiary facility in Hawaii, but brought together pretty, you know, the pediatricians, the obstetricians, perinatologists, and neonatologists. So, we had a really well rounded team that I thought really helped to drive what we were looking at.

And one of the things that we needed to really do at the beginning was look at building that consensus, and really looking at, what we are going to really address here. And, as we heard from the first speaker, if you look at the prematurity rate, if you look at low birth weight, then you're ultimately going to impact the reduction of infant mortality. So that's where we decided we would focus our efforts. And one of the things that we want to look at was not only the

risk factors, but perhaps the protective factors. And then to take the data that we had, the analyses, and look at that to help drive policy at the second level.

Again, we were trying to look at what was changing within Hawaii that was driving our infant mortality rate? Were there changes in our population characteristics, had this impact on Hawaii's economy changes patterns in immigration? Hawaii is in many ways the front door to the United States, and we have a large immigrant population. We also wanted to look at lifestyle and health behaviors. We know that there has been rise in the use of substances, especially crystal meth. Was that having an impact? Were there any kind of shifts in our community environment as well? Poverty increasing. So these are the kinds of areas we thought we would focus our energies. And then looking at the data that we had, looking at, we went through several kinds of analyses as Delaware. We began to look first within our vital records, to see if there was any kind of trend data. So we went back and looked over a 20-year history to see if there were any kind of determinants that we could look at that we could see that there were some trends happening over time. Unfortunately, we did not find anything. This is a story of continuing to ask questions in Hawaii.

And then we began to look at some qualitative data to help drive our, sort of our investigation, so to speak. And, at every turn, it seemed that we would ask a series of questions and it would all turn out to be negative. It would look like it was a direction that was causing the rise, but it would never pan out to be

statistically significant. So we kept asking questions and going deeper and deeper. And from that standpoint, then it pointed us into different data sets that we needed to look at, or the creation of new data sets.

So what did we look at? We started with the usual, the vital statistics, looking at birth, death, fetal death, infant death, and eye tops. That didn't yield anything for us. So, we began to look at, we are data-rich in Hawaii, fortunately. We do have PRAMS. So we looked at PRAMS and we began to look at some of the maternal characteristics as related to PRAMS. Again, we did not find anything of significance. We have child death review data in Hawaii. One of the things that pointed out was that there was a cluster of deaths on our Big Island of Hawaii. So we began to use our data from child death review to really investigate that cluster. Again, there are some things that seemed to be of importance, but it wasn't statistically significant. And I'll talk a little bit more of that later. And then we began to say, well, has it something to do maybe with congenital anomaly. So we began to investigate our birth defects monitoring system. Again, we didn't find anything significant there. So we began to, one of the things that we did look at was that it seemed to be clustered around the post neonatal mortality period. So we said, “Okay, maybe it has something to do with these babies are being born at a younger and smaller weight, and maybe it has to do with the survival rate in the post neonatal period.”

So we are now looking at hospital discharge data to really kind of look at that period and say what's going on there. We also developed some surveys to talk with the physicians and the nurses to say, was there some kind of change in the medical management over time? Again, we didn't find anything. The final piece that we began to look at is our Healthy Start program, to say, are we having any kind of impact there? You heard Delaware say that they're looking at comprehensive care. Well, certainly, the Healthy Start programs are on that package. So, we're looking at that to see what kind of impact we're having there, and it's certainly a high-risk group. The Big Island is the only group that really qualifies for our Healthy Start dollars, so we're looking at that population. So again, the trend data, we did not find anything really statistically significant. We looked at perinatal periods of risk, we tried to apply, Hawaii does not have FEMA, but we tried to apply that model to investigate information and again, we did not find anything significant. And the final piece as I said, was looking at unique populations, which is our native Hawaiian population.

So again, this created a lot of opportunity for us by looking at our staff internally, for staff development, to look at new ways of analyzing the data to develop new data sets and to look at hypothesis generation. And to keep pulling in more partners or unique partners that we haven't considered to help peel the onion, so to speak. And again, this was all partnership driven. If we didn't have the people around the table that had access to the data and that were willing to look at the information, we would not have gotten as far as we have. Because, this is not

something that's on the radar screen for our governor. Because, actually, Hawaii's infant mortality rates are probably one of the better ones in the nation, even though it is increasing.

And so what we come down to is that basically Hawaii is a small state. We have less than 20,000 births, and maybe it's a small numbers problem. But that's not going to stop us because we want to be the best in the nation and so we're going to continue to look at this issue. And here is evidence of that, that our infant mortality rate, as you can see, jumps up and down. And in 2004, it took a quantum leap downward from 7.3 to 5.4. We all say it's ‘cause we were studying the issue. But it took a slight increase in 2005. So, is it a small numbers problem? And you can look here at our low birth weight and very low birth weight rates as well. You can see that they move all up and down.

And here again, as I said, it went down from 7.3 to 5.3 and back up to 6.3. And you can see that with our looking at our confidence interval, this is an issue for us. Okay, so, ah, it didn't go all the way to the end. Here we go. So what we found was that it's not the usual suspects, and that we are really looking at a different level of investigation. And kind of where we are now is looking at the deeper issues of, are we talking about generational impact? Are we talking about the issues related to poverty, are we talking about the pre-conceptual issues? And the only good thing on the radar for us is that we have a bill in the legislation

to improve our family planning efforts by $4 million. And that will help drive a policy shift for us to look at the more pre-conceptual area. Thank you.