Episode three - Safety Sciences and Human Factors in M&Ms

Debbie Draybi: In this segment, Safety Sciences and Human Factors in M&Ms, Clare and Dane discussed the importance of the M&M Chair having a good understanding of safety sciences and Human Factors and understanding cognitive bias.

In our discussion Clare and Dane both give good examples of what a good M&M meeting looks like where there is a strong focus on learning when things go really well so they talk about Safety II and also exploring in a safe way when things don't go so well when things go wrong so that Safety I emphasis.

They include in their discussion why historically M&Ms were focused on Safety I but the importance of learning and making that shift to safety II and exploring when things go well and the importance of that. I hope you enjoy this segment.

Dr Clare Skinner: I would actually even go further, and I think a good share of an M&M meeting has a good understanding of Human Factors, as Dane said, but I think you also need to know your way around clinical reasoning and cognitive bias and causes for diagnostic error because it's very easy to see things in a linear, stochastic fashion when you're reviewing it retrospectively. But actually, we all know that things psychologically trick us all the time. We actually now know what most of those biases are, and I think a good M&M meeting - and I have to admit I don't like the name either, we just call ours our monthly team meeting - actually goes through the cases and talks about what was going on. What were the potential biases here? What can you do to work through those biases?

So, you need to actually get metacognitive to do this, and that means that I don't think the Chair can be anybody and I think you have to have the right person to present each case and they need to know that it's delicate and they need to know that it goes beyond just linear decision making. So, it's really easy for us in the system as we've got a lot of data about quantitative things about times, doses, etc. But we don't have much data about qualitative, and I think the true nature of the M&M done well lies in the qualitative and we need to acknowledge that and get better at it.

Dr Dane Chalkley: This goes back to root cause analysis and retrospective analysis of error. That concept of the fish bone diagram is bunk. The idea that you can in a linear fashion work from start to finish or from finish to start and then analyse and establish what went "wrong" is just not possible. Yes, it's much more linear than that in complex system. Yes, Clare woke up this morning and her son was jumping all over her all night because he was having nightmares about spiders and imagined that Claire had had an accident on the way to work or someone cut her up… And I was on my way to work and was really happy but then I forgot my wallet … and this is every person at some point has to contribute to this entropy.

Clare: Also, things like that patient looks a bit like your grandmother and your grandmother died from this. So, then you assume that will happen here. We've all done that stuff and we need to acknowledge that and talk about it.

Dane: So yeah, Human Factors are vital in this and I think ultimately an M&M is a learning opportunity. I'd like to think that Safety I as an analysis is about 5% of what we do or less. 95% of all that we do is good quality, excellent health care and I really want to focus on that. So, in many respects I try and keep that proportion within my M&M meetings that I chair so that yes, we do focus on the important Safety I principles in a safe way focusing on Human Factors and focusing on the way in which we can all learn from common and easily made mistakes.

But the majority of what I want to do is about how we did well, why we did well, and giving ourselves a good pat on the back for working in a hard environment and in a hard system with hard patients.

Debbie: So often we know from experiences of other M&Ms, which I'm sure you've had, there isn't a lot of opportunity necessarily at meetings to talk about what's being done well and use that Safety II lens. Why do you think that is it?

Dane: I think perhaps M&Ms started historically as a way - starting with surgical specialties - of looking I think at morbidity and mortality to learn from skills as technology advanced to learn from data to say well look that didn't work so we should be trying something else. The cause of that infection, the cause of that significant blood loss, or that death, and I understand those goals.

But applying those core principles directly to other specialties, and even now to surgery where you know there is a question about how applicable the retrospective scope is, I think it doesn't really apply as well to other specialties. So, I think you have to adapt like we all do, you have to adapt your quality assurance to suit your process and your process is different. I don't work in an operating theatre; I don't work in an outpatient clinic.

Clare: But I think it also speaks to the psychology and the training mechanisms of health care professionals so where we all are people who are extrinsically motivated because otherwise, we wouldn't do this. We want people to like us, we want to do well, we want to help people, so we're very extrinsically motivated. So, we tend to self-flagellate around mistakes, and we tend to be very intolerant of ourselves making mistakes. So, I think the M&M's grown up because that's actually just us as human beings - we're Type A, we're perfectionists. I'm not speaking about medicine alone I'm speaking about all the professions in my experience. But people want to help people. They want to do a good job. They hold themselves to very, very high standards, and part of that has been - it's almost probably come from a religious ethic as well - that notion that mistakes are bad and we must go through them and we must punish ourselves for mistakes, so we've come from that culture.

I also think we're trained that way. So, I grew up in a training system where you went on ward rounds and you were asked questions in public, in front of the patient, and in front of a team of nurses and doctors, and if you got it wrong, you were ridiculed. And I think we've grown up with that as our training system. I remember not being able to recite the

coagulation cascade in 1998 beautifully. And I still don't need it, ironically, despite being a doctor for 20 years. But we grew up with that system and that translates.

Dane: A good starting point for anyone who is even vaguely interested is to read the Safety I and Safety II White paper which will give you a good background and a knowledge base for what we were leading to in terms of why Safety II is very important. And I think ultimately, if you look at the bell-shaped curve of what we actually do and how well things go, we're missing the opportunity of focusing on learning from what we did well. It is so important. And yes, I was so happy to see the CEC's guidelines talking a lot more about Safety II introducing those ideas.

I think things will pick up. It's going to accelerate, but ultimately, I firmly believe that no one can leave a quality meeting without a smile on their face. You have to finish on a high. You have to let people know that what they do is valued, important and appreciated. Especially considering the last year - what a horrible time to be working in any profession, being a human being on the planet. Certainly, working in healthcare has been incredibly challenging and people need to leave knowing that what they do is fabulous, so we have another thing called amazing and awesome. Well, basically, I save all compliments, and all thank you letters, and I just go through them all and I look at the Human Factors of those and they go back to communication. They always do.

You know 86% of statistics are made up, so I'm going to make this one up: 99.9% of what we do, which is either appreciated or not appreciated, is due to communication. We are social beings, thrust together in cities and we need to communicate well and effectively. You look at these compliments and you see that this is what was done and that smile, that connectivity, that being a human being to another human being is what was appreciated so well done you and then everyone goes 'Yeah, that's why I went into health'.

Clare: Our team meeting does precisely that. So, it opens, and we go through the compliments, we go through the complaints and we contextualize them. Some of them we investigate deeply, others we don't. We go through our M&M cases. They're carefully chosen. Not everything is there. A lot of the things that don't go quite right are dealt with behind the scenes because there's no point in doing this out in the open. We go through the 'awesome and amazing' group and every month there's at least one or two great cases where someone just got it right and pulled something from the ether that saved the patient's life.

I have a section in my M&M as well, which has suggestions for improvement where I literally open the floor and ask what have you seen that's giving you the irrits or that you think we should do more of? What are your ideas? We've come up with great things like the colour coding of our resus trolleys. A whole bunch of stuff there that's come back, and we talk about wellbeing and then we have a closed loop system when we go through the actions from the previous meetings and make sure that things are closed off.

Dane: Yes, that's how it should be. I tend to think about the bell-shaped curve of what we do and ultimately when we do have a case, irrespective of the outcome, it needs to be mostly positive or, more importantly, as Clare said, pulling something out of the hat. You learn an awful lot I think probably potentially more than looking just at error. Looking at why things went well, despite everything that was meant to make it fail.

Clare: And I think it's interesting for me that those are often the ones where people broke the rules and it worked. Yeah, and I think that's the whole thing as well. It's very tempting when something goes wrong to create a new set of rules or a new checklist. The rules don't allow for every situation, so we need to be careful about what we recommend as well.

Dane: Can't believe you're suggesting people break the rules.

Clare: Guidelines are just guidelines you know.

Dane: Some rules are for the obedience of fools but the guidance of wise people.

Dane: Often our ANA is someone who said this didn't look quite right. I could have just gone through the protocol, but actually it didn't feel right, so I didn't and look what happened.

Debbie: Thank you for listening to this podcast with M&M leadership and case selection Right Material and Right people: I really hope you enjoyed it. Please note this is one of a four-part series and I hope you listen to the other three segments as I continue this conversation with Dane and Clare explore around choosing the right cases.

Dane and Clare talk about the importance of leadership in M&MS, they also talk about their experiences of safety sciences and the importance of Human Factors. We explore multidisciplinary participation and it's a real opportunity to listen in and really hear the level of vulnerability and experiences that Dane and Clare talk about as they explore their M&M leadership. Listen in as Clare and Dane discuss their insights and lessons learnt that they have had along the way in supporting M&Ms.

Debbie: I'm Debbie Draybi from the Clinical Excellence Commission and am pleased you can join us in this conversation with senior leaders on Guiding principles of effective Morbidity and Mortality in action. This podcast series aims to explore the experiences and insight from leading M&M meeting. Look out for more podcasts as we continue this conversation and clinicians share their journey and learning. I hope you find it useful and if you would like to contribute to this conversation please contact me.