ADL - Trudi Gallagher

We now move down another ratchet in terms of patient blood management and we are very lucky to have a speaker from Western Australia who is exceptionally experienced in actually implementing patient blood management at a hospital level. Ms Trudi Gallagher is the state patient blood management clinical coordinator from Western Australia Department of Health and works for their Chief Medical Officer. She lives in Perth, which is handy given the distance and is the state patient blood management coordinator. She assumed the position in Western Australia in 2011.

Since that time the Western Australian Patient Blood Management Program has gone from one tertiary centre to four imbedded programs. She has specialised in this field for 15 years, so she would have seen a lot of change in that time. Prior to arriving in Western Australia she helped expand, develop and create three different US patient blood management programs. Her subspecialty is iron deficiency with or without anaemia as well as implementing well rounded PBM programs. She's been a registered nurse for over 40 years and prior to patient blood management was a critical care nurse for 25 years. She also sits on the Australian National Patient Blood Management Steering Committee. Please welcome Trudi.

Thank you Leigh and thanks to the planners for having me come. I think this is a valid subject and it's an interesting way to look at implementing PBM and why are we talking about that when we are talking about Standard 7.

Well one of the nice things about Standard 7 is that it introduces you in fine detail to the things that can help you the most, you just have to look for the right sentence and the right time and I really struggled to find the right one but 7.1.1 in Standard 7 says "blood and blood product policies, procedures and/or protocols are consistent with national evidence-based guidelines for pre-transfusion practices prescribing and clinical use of blood and blood products". So we're going to focus on the peri operative guidelines as an example of those evidenced based and why are we talking about that?

Well I was asked to look at a particular program that maybe we have imbedded and it's kind of like describing which of your children you love the most and it's physically impossible as you know. So therefore we're going to use different qualities from the different programs in WA that have been uniquely successful and also we're going to talk about the ideal program and how you can access tools in order to obtain that information.

The most things you can say about standardising and this was part of my education in this position, was you cannot standardise how things are implemented, you can standardise what your goal is for the end result. Everyone advances at a different time, everyone advances in a different way, every hospital has a different flavour or personality and so therefore you have to adjust how you do it with each one.

This is an example that we had to strive for. We had to get something generalised in order to say what are the goals per year that implementation of a

PBM program should at least obtain. You can see this. You can have access to these slides, you problem, I'm happy to share these with you. But this was a breakdown of year by year what you should strive for each program to obtain.

The bottom-line to all this is one thing, I was asked when the standards first came out to look at PBM programs and tried to share would could attain what in the standards. Guess what? If you're doing PBM, a regular program in an institution you are accomplishing Standard 7. If you don't have a PBM program in place and you do Standard 7 to the letter you've already started your PBM program, they work one or the other, it doesn't make any difference which one you choose, it's a win/win situation either way and that goes for the guidelines as well.

So what we're going to do is we're going to walk through these different examples of recommendations on the peri operative guidelines. The words in italics are directly from the recommendations from the little manual and the rest of it is how PBM accomplishes those things, whether it's specific to WA or not, I wanted to give you some guidance.

So the first thing that we love the most about what the peri op guidelines say is healthcare services should establish a multidisciplinary multimodal peri operative patient blood management program. Now when we're talking about PBM today for example, sometimes it's been referred to in relation to transfusion reduction, sometimes it's been relayed in competent or appropriate transfusion. PBM programs are far more than that. Yes they are that but they're much more. So when I'm referring to programs, I'll show you a document at the end that will define for you what a PBM program looks like.

So first of all you've got to find your heroes, your champions and those are the people that you go to first. You find that one little niche in the transfusion committee location first. We've learned the hard way that unless you go to them before you go to administration or to your exec level you're going to run into some brick walls later. So go to your transfusion committee, get their buy in, then go on to the exec level then the medical staff then the nursing staff and then set up your next committee, which is your PBM committee. These are the key players, these are the minimums that you want to be sitting on your committees. This is your multidisciplinary committee. They are going to problem solve with you how do you get the flow through pre-op realigned and re-setup, how do you have the follow through for the post operative patients, how do you establish something for the community so that that GP that has that chronically iron deficient patient, I don't know how to prescribe IV iron, how do I do that, how do you have those type of available facilities and who decides how to do it? These are the members that you want to have in place.

What about the pre-operative anaemia that should be identified, evaluated and managed to minimise RBC transfusion? Well we have for example in our three major tertiary centres, this is setup totally different from one to the next because they found out little glitches that were unique to their centre that things had to flow through. We had one centre who does not even put them on a waiting list until they've gone through their initial assessment and that's just basically your lab, then once their iron deficiency is taken care of and they've been cleared through all the different specialists then they can go on the wait list, then they come back in after that date and get looked at one more time before they go onto surgery. There's another centre that does just the opposite because their wait list

time is longer than the other centre and so therefore they go ahead and wait until it's much later and then they do it. So it depends upon your speciality that you're looking at and it depends upon the flow of your patients.

This document is on our website. Do you look at all these patients, I mean every single patient that has come in from surgery, do you optimise them, do you look, no not necessarily. This is a list that we've established. It originated in the US but we've been using it in WA for quite a while now and it's on our website if you want to attain it and it basically lists the different procedures that should have that second level of assessment done, not just the RBCs, not just a CBC but they're iron stores etc. These are the more predictable larger blood loss cases. So that's how we do that, we have the anaesthesia crew look at that list and if they fall into that criterion and they don't have the iron panel done then they go ahead and get them.

We have had oral iron in the pre-operative setting. Yes, it is used but the nurses in the different tertiary centres that are establishing these programs understand which patients are not appropriate to have oral iron versus those that are. There are some drugs that block these, there are conditions that are not going to be conducive to oral iron and if you don't have a minimum of six to 12 weeks prior to surgery in order to assess whether they are absorbing or they can tolerate it then you don't want to even try that. So therefore there's IV iron category and then there's oral iron category and in PBM you learn to adjust your flow of your patients accordingly but we do use it in some patients.

What about ESAs? (9.17) Stimulating Agents, we do have a guideline on our website in case you don't have one setup in your centre but if you look at the peri operative guidelines they do recommend that you have something established at your centre for a guideline sheet as to who qualifies, who doesn't, when it should be used, when you should not use it, for example in what iron deficiencies or iron stores need to be there before you start your ESAs and how to time them according to your pre-operative flow of your patient.

The clopidogrel was already addressed earlier. The problem is that some surgeons say seven days, some surgeons say five days, so your PBM committee as well as a surgical representative for each speciality can sit down and establish a list for these different agents and what timeframe needs to be stopped. There's nothing worse than getting to the day before surgery and you find out "oops, somebody forgot to stop that drug" and then the case has to get cancelled and then you go back to square one. So therefore that needs to be established and written down within the department; same with aspirin, the same thing applies and with NSAIDS. Some surgeons and orthopaedics sometimes want it longer, held out, before others and other times they don't care.

PAD, we talked about Preoperative Autologous Donation earlier, it's basically not done much at all in the public sector in WA anymore for all the reasons that were discussed earlier, it's expensive, number one, it's dangerous, number two, the patient goes to surgery more anaemic, more iron deficient and the studies basically say that they're transfused 50% of the time with allogeneic and autologous and the other 50% don't even get their blood back but now they're profoundly iron deficient and now you have to take care of that too so therefore it's rarely used anymore and should not be as a regular rule of thumb.

ANH, we talked about that a little bit earlier amongst the audience and basically it depends upon your anaesthesia crew. Some still say it's a great tool, others say it doesn't do anything at all, the literature is 50/50 and so for example the Society for Advancement of Blood Management, we've just shifted it out of our standards as an option but not as a primary tool of PBM.

Inner operative cell salvage. Of course if you don't bleed a lot you don't need cell salvage, so that's your first rule of thumb is try to reduce the bleeding as much as possible but it is available and of course you need to have different, if you use outsourced cell salvage teams you have to make sure that they're in compliance with all of your PBM standards at your centre.

ROTEM. We now have four ROTEMs in town. One centre is using it a lot, the other centres have just either obtained and they are getting use to it, there is a learning curve involved, there are some problems for logistics and how fast the results come back in order to do you any good. So those are things that each centre again, uniquely different from the next, need to get established in order to really utilise it well.

TA is a great drug. We have one centre that's been using it for all their elective total joints for the last three years oral pre-op oral post-op. It's absolutely dirt cheap compared to IV. They've had a 0% transfusion rate on their knees for over a full year now and about a 12% on their hips. They don't use any drains. They see that little blood from the TA, they've had no adverse events that are reportable, they're going to be publishing sometime now within the next year and it's the first time that we will have seen something in the literature on oral TA. They love it, they think it's great and in the cardiac sector they don't use it as much because they are still waiting for the fine print in the cardiac population but it's been a wonderful drug in the orthopaedic population as well as in acute injuries it has been used as well.

Post operative cell salvage. It's very rarely used especially in the TA orthopaedic group. I know in the United States they're still using the ConstaVacs and the Tip and Drips as we called them back there. It's not necessarily on the east coast here from what I've heard from different orthopaedic nurses that it's not being used as much as they used to and there is a theory of least resistance, it actually may increase the bleeding by having the drain in but again it's per centre policy.

FFP. If you have your in-house transfusion guidelines established make sure they're up to date with the guidelines and what's recommended.

And our dear friend, 7A, we won't even go there because the biggest issue is do you have something in a policy as who is the gatekeeper for that decision, who is going to make sure the phone call is made to the right sources and is it going to be abused or used appropriately, that's the bottom-line for 7A.

So this is just an example of some of the things that are mentioned in the standards and in the guidelines that you would want to have as measurable indicators that you have this in place because I would like to think that by 2017 when those standards are re-written we will have advanced to the point where we say "do you have a formalised PBM program in place" and that there are indicators established to say "yes you do" because there are so many safety issues that are involved with PBM that I find it hard to believe that we won't get to

that point. The United States is trying to get joint commission to get onboard to say "yes, you will have this and once you have x number of patients annually coming through your centre" but they're still mulling that decision over.

So these are the different indicators. These are just some of them that are on this document which are accessible on our website. This is about an eight page assessment tool, our centres use it, I ask them to do it quarterly and send it to me so that I can itemise for them what is the next tool that needs to be done next in their progress through their program, what they might want to try before something else, depending upon the dynamics of their centre. But these are measurable indicators to prove to themselves "we have x number, we have now 10% more to go before we are 100% complete". We have one centre who is near 100% at three years into their program but as Leigh said earlier, there is no perfect program, you're just trying to make sure that you have all these wonderful indicators identified and accomplished eventually.

Please take note of my email. I'll only be in Australia for about another year. My goal for coming here was to help get Australia the first country in the world to make PBM a standard of care and I'm on this mission to get this accomplished, wherever anybody may need me, so please utilise me if you have any questions on how to adopt this in your own centres.

Thank you.

Questions, comments?

Thanks very much Trudi. I just wanted to reassure people that there's a fantastic package of information about PBM that's available but there's also little snippets that you can get and there are some samples up the back of the room there. There are some great brochures already translated into I think about eight or 10 other languages about what you can provide to patients about how to, important things about having oral iron or if they're having IV iron, so people can make little inroads, if it can seem overwhelming if you like to take on the whole PBM piece of work and some of that information is available locally and there's also some more information available through the National Blood Authority; and I just wanted to flag from the other speaker, Peter Bardy, that I think there's a lot of private sector representatives here today and a lot of our presentations that have got the lovely SA Health helix on them but just about all the blood governance groups that are operating at a state-wide level absolutely welcome private sector engagement. So please come and see myself or someone else from SA Health about how they can get involved.

I agree. I think that there's a lot of reinventing the same wheel that's going on around the country. It's real unfortunate because this is very time consuming work. I've mentioned several times the things that we've put on our website. Personally I'm fine with anybody using anything that's on that website. They're just examples. They're samples, they can also be redesigned and put into your own format anyway you want. The issue is, is that this is a national/international issue and therefore I think the more that we network together and talk about how to get this accomplished, we've offered our services from the Department of Health PBM team to the private sector multiple times in our area and they have not acted on that offer at all so I hope that they understand that this is good medicine, this is good practice, they're doing a wonderful job in their standards,

as we heard today but at the same time I think any of us here would be willing to help any of them try to get their centres up and running.

Trudi, Australia suffers from population point concentration and in Western Australia particularly you've got focal Perth and then these small centres. What's your affect been with this program on getting out to the small centres and have you seen a measurable response to benefit?

Well what we used to consider small is no longer small because as you know the growth in WA has been really mindboggling in the last few years. Joondalup which used to be considered a small centre is now 600 beds. It is the fastest growing area in WA. When you go further north than that of course the numbers drop drastically.

We have tried to get the word out through all of us in the health department as far as if you want to engage in these mini education sessions that we put on, telephone conferencing, anything you want, we will be happy, we will come to you. But trying to get that activated is a whole other situation. They have to want to have us come. So same old story.

Other questions, comments?

Trudi, can I just ask, was there some seeded funding or specific funding put into each of those health centres to help establish the programs and have them grounded or was it done from their own funds within?

Always a hot subject. The first five years was a five year contract. It was establishing one full FTE for a CNC nurse to be established in each of the tertiary centres with a 0.2 of a medical director. Of course there was a job freeze on for 2½ years in the Department of Health and so that kind of came to a standstill. So as you heard Leigh explain at the beginning, there was only one centre onboard by 2011 and the funds were still sitting there waiting. Now the standards I believe I think helped promote them to take advantage of that remainder option. So we ended our five years in June of this year and we've been re opt for one year assessments. So we're trying to prove our worth, so to speak and impress them that this is a worthwhile effort to renew those funds for the next five years but if not then we'll have to go to each individual centre and ask if those funds can be carried over by themselves. We'll see what happens.

Okay, we're now moving off to lunch but before you go Trudi, for those that don't know the Western Australian PBM program has been a highly successful program, a large amount of the credit for that rests with Trudi and as she said she's one of those willing people that is willing to share her knowledge with anybody in the country and it's paid for by the Western Australian government, which is even an excellent advantage.

On behalf of everyone here, thank you very much for your time and coming across.