



Knowledge Natter – Lou Northway and Elizabeth McLennan-Green

RCVS Knowledge

Welcome to this Knowledge Natter by RCVS Knowledge. Here, we have friendly and informal discussions with our Knowledge Award Champions and those who are empowered by Quality Improvement in their work. Whether you are a veterinary surgeon, veterinary nurse, receptionist, or member of management, Quality Improvement will and can positively impact your everyday life. Listen and be inspired.

Lou Northway:

Hello and welcome to this RCVS Knowledge recording. My name is Lou Northway and I'm Clinical Lead RVN here at RCVS Knowledge. Tonight, I'm very pleased to be speaking to Elizabeth McLennan-Green, who is representing the Small Animal Clinical Leads at CVS. The Small Animal team within CVS audited the small animal ear cytology on a national scale over a long period resulting in an increase in diagnostic tests and a reduction in antibiotic use across a wide range of practices. One of the key outcomes of introducing this QI initiative was the widespread improvement in the knowledge and scale of vets and nurses in all stages of their career. Their audit demonstrated strong leadership for the QI initiatives and highlighted that meaningful culture change takes time. Good evening, Lizzie. Thank you so much for joining me.

Elizabeth McLennan-Green:

Hi, thanks so much for having me.

Lou Northway:

I'm so pleased, tonight, that we've both managed to get here on time when we both have small children. I think that is very impressive.

Elizabeth McLennan-Green:

It's quite a miracle, to be honest with you.

Lou Northway:

Isn't it? Absolutely. I was just thinking tonight, since I've had Max, I wish that auditing baby sleep would actually be effective, but I've learned along the way that in fact it doesn't work like that when it comes to babies. We don't have the desirable outcomes we all hope for.

Elizabeth McLennan-Green:

I would completely agree. A total waste of time.

Lou Northway:

Yeah. I used an app, I think like you said before we started recording tonight, to try and track and trace what we were doing to see if we could improve things, but I didn't find it worked. Anyway, we've all been much more successful in our veterinary clinical audit work. Let's get cracking talking

about the amazing work that you and your team have done. Where did your inspiration for this particular project come from? Where did it all start?

Elizabeth McLennan-Green:

I can't take any credit for this whatsoever. It actually came from my colleague. Her name is Lisa Baker and she's a member of the hub clinical lead team. She is an incredibly passionate individual and she understood that cytology would have a great impact, I think, in terms on veterinary teams, in terms of patient care and also on the team itself, engaging nurses and getting teams to look at the way that they're working. We actually had, a couple of years back now, a brainstorming session.

Elizabeth McLennan-Green:

As part of that, we localised focuses that we thought, as a team, we could potentially work on. We were really looking for opportunities for improvement because the team that I work with that is essentially part of our function. We were also looking for something that we could effect on a large scale. Previously, it had been worked on in localised focuses, but we wanted to do something on a national scale. We knew that improvement in this area was needed, well we thought improvement in this area was needed. We were fairly confident about that and that we thought that its impact would be far reaching, and that the introduction of cytology, obviously, has further possibilities beyond just ear cytology. That was our starting point, really.

Lou Northway:

Yeah. Just listening to you say that, I think most people listening right now will be thinking that, "Oh gosh, how many dogs in a day do you see with otitis?" A lot, depending on where you work in the country, especially if you're a dog heavy practice. Yeah, I can see how it was a big target for you. Because you worked across lots of different practices, there were lots of different places for doing this. How did you collect your data?

Elizabeth McLennan-Green:

So data collection, I'm not going to lie, it was a challenge, not from a technical point of view. We were very fortunate. The vast majority of our sites are integrated into a single practice management system. In terms of being able to extract data, we can do that locally, but we can also do that on a grander national scale as well. The difficulty that we faced was how do we identify an ear case? We don't have, as I'm sure most practices don't have a specific ear case code, you don't have any ear consultation. Maybe some sites do, but we don't. We had to think about how are we going to get an idea of what was going on? We thought about looking at our prescribing habits, and we looked at the prescriptions of antibiotic treatments for ears. We then cross-referenced that with cytology events occurring and, specifically, we do have a code for ear cytology, but it's an in-house cytology, so it can't be completely isolated to ears.

Elizabeth McLennan-Green:

That's why we had to cross-reference against the antibiotics within the same timeframe, which we defined as within 30 days. Now, essentially our data collection, we acknowledged straight away it's an imperfect data set. We were looking, mainly, for trends. It was never going to identify cases where practices were using ear cytology and on the back of that, were then not prescribing antibiotics. However, if we look at it from a point of view of, well, if you are doing that, then your relative number of cases that you are seeing are going to be quite low and also, you should be using cytology when you are prescribing antibiotics.

Elizabeth McLennan-Green:

Therefore, we felt that it was appropriate to be able to look at who was, potentially, doing well and who, potentially, needed more support in order to improve their use of cytology. Although, it's not perfect tracking trends. To give you an idea of scale, the first audit we did was a three-month period and it pulled more than 26,000 cases.

Lou Northway:

Wow.

Elizabeth McLennan-Green:

Our first data set was 26,000 cases.

Lou Northway:

That's incredible.

Elizabeth McLennan-Green:

It's quite remarkable in terms of... Hopefully, the data we have, although it's imperfect, it's over such a vast scale that I think it probably does reflect reality.

Lou Northway:

Yeah. That's absolutely incredible. 26,000 cases. You can really, then, think about how many people were involved in that process of seeing all of those animals. When I was reading through the amazing quotes you sent me from the teams of how they found this project so beneficial to themselves, to the patients, and to their whole team. One thing that really shone through was how they had utilised training that they had had. A nurse had commented that she had done the BSAVA Merit Award in Dermatology, and that was a vet nurse called Shelly. Prior to doing that, she didn't have the confidence or feel like she could utilize her knowledge, but then with the support of her team as well, she has, and she's found it really, really rewarding. I was just wondering what other types of training did teams do? Was it one person went on a course for the day and then came back and disseminated it, or how did it all happen?

Elizabeth McLennan-Green:

We went about it in different ways. Obviously, there's a broad variation in terms of skill within practices. We didn't want to make a blanket policy that everybody had to send somebody out of practice for a day. In some sites that wouldn't be appropriate. There's adequate skill within the practice. We asked clinical leaders within the practice to, essentially, when we launched the project, asked them to consider where they were at, based on the data they had, where they felt they were in terms of a skill level. Was there enough skill within the practice that this could be something that could be disseminated internally? As you rightly pointed out, it only takes one person, really, to share their knowledge and train the rest of the staff on site. We did put together an online training course that was based on our Moodle platform so that there was reference material that could be looked at as a refresher or for sites where there wasn't sufficient knowledge and then sites who've still felt that they needed direct one-to-one support.

Elizabeth McLennan-Green:

That's where the hub clinical lead team come in. We all cover, essentially, somewhere between 20 to 40 sites. Not every site needed assistance, but in theory, if each of us had to go and assist five or six sites directly, then that was done. We looked at this in a really straightforward viewpoint. We were only looking for identification of, cocci, rods, this is purely ear cytology, so cocci, rods, malassezia. Are they there? What quantities are they in? What treatments should we give based on

what we find? When are we going to receive this patient? When are we going to swap this patient? What are we going to do if we find the case where we've got itchy ears, and we haven't got any of these cytological changes that we might be expecting.

Lou Northway:

Yeah. I bet the clients really loved it as well, having more efficient test results rather than having to wait up to five to seven days to get results back from the lab when things are posted. The turnaround time, I imagine, was much quicker.

Elizabeth McLennan-Green:

Absolutely. Sometimes clients were being sent away to wait for results before antibiotics were being prescribed. Sometimes they were being prescribed something off the shelf to make things a little bit better. Again, it was then being changed five to seven days later, as you were saying. Certainly, sometimes the cytology wasn't being done, but a lot of the feedback we got was actually the clients really enjoyed, not necessarily looking down the microscope, although in some cases, in particular in the small site, the microscope was in the consult room. Actually, the number of-

Lou Northway:

Amazing.

Elizabeth McLennan-Green:

Pre-COVID, they had clients looking down the microscope, and actually very engaging for a client. Not always sure if they 100% can see what they're looking at, but it's very engaging for a client to be able to see progress. It's so difficult with ear disease. They can't see down the canal. They can't see always what we are looking at. They have to take that on trust. Being able to look at the microscope, I think that definitely encouraged them, particularly for the return appointments that are so important.

Lou Northway:

Yeah, no. I can imagine that engagement is much, much better there from the client perspective. If I was a pet owner, I'd probably like to have a nosy at what the vet was looking at too, or the nurse was looking at. Along the way, it was largely a hugely positive and influential project, but did you encounter any problem along the way?

Elizabeth McLennan-Green:

Obviously, we anticipated and we expected some barriers to be raised. The first thing that we were aware of was really going to come around lack of confidence within our teams of using the microscope. The number of times microscopes are not working. Just day-to-day upkeep of the microscope has to be good to keep it functioning. We can't rely on a yearly service, but that requires a certain degree of confidence to, certainly, dismantle a microscope. We started, really, with focusing on building that confidence and getting people really used to focusing, at times, a hundred and really encouraging them to just have a go. Look at anything, but focus it times 100. Again, it's using a microscope and then there's using the oil immersion lens. It is a different kettle of fish using that to look at any pathological event.

Elizabeth McLennan-Green:

The next big barrier that we knew we would come up against would be that perceived lack of time, particularly practices. Most of our sites run 15-minute consults, but some still run it 10 minutes. Certainly, even a 15-minute consult, that idea of being out of the consult room, doing something

else, that was a challenge. We knew that we were going to have to do an equipment audit. That was part of our initial auditing process, was to make sure that we were adequately equipped. We couldn't go and ask teams to do work that we hadn't actually provided them adequate functioning equipment to do. That equipment audit did raise that. In a number, I think we invested in 65 microscopes in total. Okay, it's a lot, but it's not a lot considering the number of sites that we had, but that is, mainly, branch practices of larger practices, so the branch practices who would, maybe, have previously sent stuff over.

Elizabeth McLennan-Green:

The reality is that either the client doesn't want to travel to the other site to have the cytology done, or the vets at the branch practice. There's that barrier, again, to time to going in, to use the microscope. We didn't want that to be a case. Following the audit, there was an investment in equipment so that every site across the business has, and that was another outcome of the project with it.

Lou Northway:

Yeah. Really positive. Really positive outcome. Again, I'm sure those listening can relate to the practice microscope that is being broken or is beyond dirty and is actually relatively useless. Yeah, I think audit can really help you get equipment that you need because it can show that if we do this good work, we need the good equipment to do it, and then we need more good equipment. Yeah. Positive, again, all round.

Elizabeth McLennan-Green:

We also had to look at the accessibility of the equipment. Where was the equipment relative to where it was needed to be used? Having it upstairs in the laboratory when, actually, in the consult rooms are two floors below, it needs to be moved. Again, there was a piece of work to be done as part of this, which was to ask teams to think about how were they going to facilitate this? This was, again, back to that perceived lack of time. What can we do to spin that around and make it easier? Can we have mini staining kits in cat litter trays in every consult room? Can we have the microscope? Okay, maybe not one in every consult room, but can we have it in dispensary so that we can stay in it whilst we're talking to the client and then we can just pop to the dispensary, and have a look at the slide whilst we're choosing something off the shelf at the same time. What can we do to break down those barriers?

Elizabeth McLennan-Green:

We also identified that there was some views out there that cytology wasn't going to change treatment choice or the outcome. I guess that's something that can only be worked on with time and education and engagement, really. Obviously, cytology does change our treatment choices. Particularly with the event of when polymyxin B was changed in classification, that did ask us to really reconsider what are we using? It does change our outcome because it significantly reduces the times where we actually prescribe antibiotics at all. Then the last thing was, again, this is probably a more of a business point of view, but not necessarily wanting to charge for the service provided.

Elizabeth McLennan-Green:

Interestingly, in our auditing, we can only assess if a practice is doing cytology, if they actually charge the client for it. If they don't charge that service code, we can't audit it. In some cases, we had practices who were doing lots of cytology, but were not charging the client for it and not valuing their time, and not valuing that skill. Again, there's two pieces to work on. Either, one, the confidence that what they're doing is the right thing. It's so advantageous for patient care that

there's really no problem. Also, then just the general unwillingness to talk about costs. It's always difficult, but it's part of our profession and we have to do it, but we have to value our time.

Lou Northway:

Absolutely, yeah. As you say, our time is precious and valuable. If you've done training and you can undertake the task, then we should, of course, definitely be charging for it. We'd be charging the client however much we charge to send it away, but the exact same process is happening there. Let's take control and do it ourselves and be really motivated and stimulated, encouraged as a result. With the oral cytology, was it 50/50 split with the vets and nurses on who was actually undertaking the cytology in practice?

Elizabeth McLennan-Green:

When we launched the project, we went out to the clinical leadership within the practices. The clinical leadership could be the clinical directors, but it could also be the head vets as well, and the head nurses. We, very much, encouraged this to be delegated in the most appropriate way for that particular site setup. We had such a variation that we didn't dictate how that should happen. Cytology really lends itself to being nurse-led. Obviously. It does require the right setup. It does require the right amount of time given over to the nursing team to be able to fulfil that as a role, but it absolutely does. In quite a lot of our sites, it was the head nurse or one of the lead nurses that took on responsibility. In other sites, it was the clinical director, head vet, but we also found that quite a lot of our younger vets and nurses were quite keen.

Elizabeth McLennan-Green:

They have, more recently, been through training. A lot of the time, they were more up-to-date in their skills, so in terms of utilising the microscopes, cleaning the microscopes and identifying what they were seeing there. In some sites, it was our new graduate vets and, in some cases, our student nurses who took the lead role. It was quite a variation. The responsibility, in terms of feedback, came from the clinical leadership, but how they chose to delegate that within their sites was up to them.

Lou Northway:

Yeah, that's really inspiring to hear that so many different individuals were involved. Again, I really hope everyone listening feels inspired and motivated. I certainly think that is an audit, which I may be going back to practice with to encourage my team to crack on with next week. Right. How do you think your team's view of Quality Improvement has changed and audit, specifically, now you've been awarded as Knowledge Champions and they've been through the process?

Elizabeth McLennan-Green:

I guess, we have such a wide range of teams. In terms of my team, the team I work for and work with, we are fully sold on QI and that, because that's part and parcel of what we do. A large number of teams that were involved in this project as well across the country, they are well used to using auditing tools. They regularly analyse different aspects of their performance and look for opportunities. However, for some of our teams, this was either quite new or completely new. Obviously, because it was done on a national scale, we tried not to use the term audit too much. We didn't want it to be overly intimidating. Our audit has a slightly, especially when it's done externally, has a slightly big brother-

Lou Northway:

It sounds quite formal, doesn't it?

Elizabeth McLennan-Green:

It does. Especially when it's been done externally. It's almost like we're watching you and that's not what it was about at all. We definitely kept it as casual as we could and referred to it as a project, and an area that we wanted to work on. It was really interesting because as part of this, as well, we would produce data every month, but the practices are able to do their own localized auditing within their own practice management system, and so we gave them the tools to be able to do that. That system of auditing is, essentially, the same system that you would use to audit lots of different things. It's really interesting, the feedback we've been getting, because some of the sites who had previously either not really done any auditing, or they hadn't really had an awareness that that was something that they could do, or actually how you would go about doing that.

Elizabeth McLennan-Green:

We've actually started looking at different aspects of their workplace. We've had lots of really great staff from a site that we had, that was relatively newly acquired, where the student veterinary nurses, they were just doing the temperatures of patients post recovery, which is a great audit to do. Actually, that led to some changes made in I think they got a Bair Hugger as a result of that. Lots and lots of different things, but it's just bringing something to the forefront, isn't it? It's encouraging people to think about how they can impact their own workplace, their own environment. Sometimes we feel a bit frustrated about things at work, but actually we all have the power to change it.

Lou Northway:

Absolutely, yeah. That's a really good inspirational quote there. I completely agree. Just thinking as an individual team member, what are you interested in? What are you passionate about? What would you like to improve within your own workplace and then crack on and do a little audit, dare I say it? Keep it simple and keep it friendly, and you'll actually really enjoy yourself and then be really encouraged and motivated to do something else. I just find, once you do one thing, your brain goes off and you think, "I'd quite like to look at that now. Should we look at that?" What's next? What's next on the agenda audit-wise? Can you share with us?

Elizabeth McLennan-Green:

Well, this project was really only the first, to be honest, in a rolling calendar of projects. We almost wanted this to be just a stepping stone of where we could go. Since this project, which has actually started back in the end of 2019, we've moved onto the second phase of it, which was to look at cutaneous masses, so aspirating every mass that comes through the door now. Obviously, we can send all of that off which, in a lot of cases, it might be appropriate to send it off for the pathologist's opinion, but also just encourage our teams to be looking at each and every one of these samples, and to do that in-house.

Elizabeth McLennan-Green:

We have all the equipment. We know we have all the equipment to do it, and therefore, building up confidence in what they're seeing and then, if necessary, cross-referencing it to the pathologists so that we are learning at the same time. I've been off, so I haven't seen the data, but I think that's definitely showing an uplift in the numbers of masses, therefore, being removed. We take the approach of every mass coming through the door, ideally, should be aspirated, that we have a knock-on effect, that we're finding more things. That's-

Lou Northway:

Yeah, I think, again, that's a brilliant audit, and a brilliant project to promote and encourage other teams to do. Like you said, they've built their skill set up already with aural cytology. Yeah, let's crack

on and look at some fine needle aspirates and go from there. Yeah, I just think that the opportunity are endless really.

Elizabeth McLennan-Green:

This year's-

Lou Northway:

We'll be looking at faecal samples next.

Elizabeth McLennan-Green:

Absolutely. No, this year's big project is looking at improving radiographic series quality. It's not been launched yet, so I hope I've not said too much.

Lou Northway:

Exciting preview, everyone.

Elizabeth McLennan-Green:

No, that's this year's project. It's due to be launched very shortly.

Lou Northway:

That's very exciting. I look forward to reading more about that. To finish off, Lizzie, what words of advice do you have to anybody listening?

Elizabeth McLennan-Green:

Gosh, it's difficult. Isn't it? The one thing I would say is, obviously, this was quite a big project but I don't think it matters. I don't think it matters. We've spoken about this already. The principles apply to anything that you do in practice. Anything that you see that can be improved. I think the easiest way for someone to start is, really, to take that one thing in practice that either interests you, or actually, that you see all the time, that just niggles you, or worries you, that could be done a bit better, if that makes sense.

Elizabeth McLennan-Green:

Sometimes things niggle you. You don't know if it could be better or worse. Actually, the best way to do it is to have a little look, see if there's any data, think about how you can measure it, see whether you think there actually is a problem, first of all, or there's any improvement, first of all. If you then identify where you're starting from and that there is improvement, make the change, whatever change that is and look back. It doesn't have to be the hugest thing on the planet, but yeah, just start small. I'm just trying to think off the top of my head what's a great project.

Lou Northway:

I like what you've already said. Post-op temperature auditing.

Elizabeth McLennan-Green:

Post-op temperatures.

Lou Northway:

Absolutely.

Elizabeth McLennan-Green:

I think also, I love how many days cannulas have been in as well.

Lou Northway:

Yeah. That's a great one.

Elizabeth McLennan-Green:

What leg the cannula is in, and just keeping a record of how often that's recorded.

Lou Northway:

Yeah, and also everyone, just to mention, the National Audit for Small Animal neutering, that's a really good place to start as well if you are unfamiliar with auditing and you want to get started. Everything you need is on the RCVS Knowledge website. Yeah, just have a look at your post-ops. Brilliant. Well, thank you so much, Lizzie, for your time this evening. I've really enjoyed speaking to you and you've given us so many pearls of wisdom. I really think everyone listening will be wanting to go back into practice and get cracking with their microscopes now as well.

Lou Northway:

To everyone, thank you very much. To apply to be a Knowledge Champion, please submit your work. No matter how big or small your project is, we want to know about it and you should be proud of what you are doing at the moment. Award winners are named as RCVS Knowledge Champions and they will receive a plaque, badges for you and your team, if applicable, and £250 prize money to spend how you wish. Hopefully, maybe towards a new microscope. Applications close on the 4th December. For more details, visit www.knowledge.rcvs.org.uk. Please get involved. Thank you very much.

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