Vetshots – What are the Goals for the Veterinary Profession?

Ahead of the Petcare Innovation Summit, Liz Barton reflects on learnings from the Digital Veterinary Summit which took place on 27-28 July, and where she sees opportunity for innovation in the companion animal market.

October saw the announcement of five global Earthshot prize winners. The Earthshot prize was designed to incentivise change to help repair the planet over the next decade, to improve lives for generations to come. The inspiration stems from President John F. Kennedy's Moonshot, which united millions of people around an organising goal to put man on the moon.

Rather than any reference to vaccinations, I've borrowed the idea to call out the following Vetshots as key areas for innovation and change brought into focus at this year's Digital Veterinary Summit. Currently, the veterinary industry is in urgent need of collaboration and action around key Vetshot goals relating to the sustainability of our workforce and provision of veterinary services, to ensure continued improvements to workplace culture, animal welfare and husbandry, and protection of our environment.

The parallel between the Digital Veterinary Summit Innovation Showcase and the Earthshot Prize extends beyond recognising achievement. Both action to connect funders, businesses and individuals to maximise impact and take solutions to scale; celebrate the people driving change; and inspire people all over the world to work together to find solutions to problems. The themes that emerged during the Digital Veterinary Summit conveniently converge around five themes we can think about as our Vetshots for a brighter future.

1   Data – generating useful outputs

We generate a vast amount of data across the veterinary industry. With the growing pet population, the advance of pet wearable devices and remote diagnostic tools, and increasing digitalisation of processes, the rate of data growth is constantly accelerating. In our first Vetshot we look at how we harness the potential of data.

The challenges lie in how the data is generated and held in silos, organised and analysed, and cross-platform compatibility. Initiatives such as the vHive collaboration between the University of Surrey and Zoetis show great promise for commercial and academic organisations to come together and provide advice, expertise and opportunity for data sharing to create useful outputs. Savsnet collates data from across veterinary practices and laboratories to feed into actionable research and surveillance, and RCVS Knowledge encourages collaboration and networking to advance evidence-based veterinary medicine. The One Health Group takes this a step further

with integration of human, animal and environmental data.

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As data volume grows, so does the need to expand the capacity to analyse it into useful insights. Here is where AI comes into its own. Connecting veterinary and data analytics expertise is an exciting area of continuing development. Companies like Vet-AI are developing algorithms for remote diagnostics and generating the data to show how effective these tools can be. Another huge potential for AI is to bring earlier diagnosis of disease, and even the ability to make a diagnosis not yet possible with our current set of tools. This has already happened in pathology where AI revealed that certain tumours can be identified by the cell types surrounding the tumour rather than the cancer cells themselves, which had not been realised until machine learning identified the patterns.

Rather than fearing the 'day job' of vetting will be replaced by AI, its true power lies

in improving animal welfare outcomes through earlier diagnostics, increasing efficiencies and saving time for the human – providing the checks and balances – at the end.

While there is huge opportunity in the data sector, frustrations remain. Long have innovators – especially those approaching the veterinary sector from other industries – bemoaned the lack of integration between various practice management systems and digital solutions. The rate of adoption of shareable APIs that enable plug-in solutions to integrate neatly into existing software is slow. Fear around commercial vulnerability and privacy aspects of data sharing lends itself to a closed-door approach.

These challenges are being addressed by the Vet XML Consortium, which is working to introduce data standards and bring stakeholders together for round table discussions on how to raise awareness and implement these standards for the benefit of all.

Getting the 'big players' around the table to accelerate the shareability of data will help this Vetshot reach the stratosphere of data potential.

② Environment – sustainable practice

Where does one start with the challenges facing our planet? The COP26 conference in Glasgow reminds us again of the urgency and enormity of the task we have as (historically pretty poor) caretakers. From the linear processes that result in accumulation of waste, to the energy used to run our practices, the onus is on us all to do our bit to reduce the environmental impact of our profession. For our second Vetshot, the key is to not become overwhelmed but to start making small changes and build over time.

Take carbon emissions, for example. In addition to our individual carbon dioxide output, we can impact the carbon footprint of the animals under our care. In a recent interview, Andrew Prentis pointed out that in small animal practice the total footprint of the dogs and cats that we look after is probably of the order of 1,000 tonnes of CO_2 per year, which is about 80 times greater than the amount that we are responsible for as individuals. Whereas a poultry vet may be responsible for sheds of birds that have a carbon footprint equivalent to 100,000 tonnes of CO_2 a year[1]. Changes in feeding, housing and heating could have a huge impact on the total carbon emissions of the national

flock. Expand this to the total national herd, pack or stables and the veterinary industry has a huge role to play in emissions control.

Susan Paterson highlighted that practices offering teleconsultation as an adjunct to physical trips to see the vet not only provide the potential for more touch points with an owner, but can also reduce the carbon footprint of travel.

Expand the environmental impact to include responsible medicines use, resource use, waste and sustainability and the potential for positive change is enormous. The gauntlet is thrown – we need a new wave of innovators in this space to meet the challenge! The vital first step for all of us is to identify where changes can be made and start making them. The Vet Sustain website has more information and tools to start the journey to more sustainable operations[2].

③ Workforce – cleaning the ocean of talent

Our most valuable resource is our people, and our people are at an all-time low as demand for veterinary services far outweighs supply globally. The need to clean up our pool of talent has never been greater. Rather than relying on the opening of more taps, we must focus on reducing the polluting influences of long hours, high workload and cleaning up workplace culture if we're to stem the current tides looking to leave the profession. The looming retention and recruitment crisis has been exacerbated by the pet boom that occurred during Covid and, in the UK, Brexit. Our third Vetshot is all about tools to support our people.

This vast topic warrants an entire suite of articles addressing everything from university admissions and training, through to clinical and pastoral support spanning entire careers. We need to champion diversity and inclusion from student selection onwards. Undergraduate education needs to build skills and knowledge for not only day one clinical competence, but individuals equipped with the tools to thrive despite the pressures of the emotionally and physically challenging arena of practice life.

In a recent study, the number one reason vets leave practice was poor culture, then poor work-life balance, and thirdly salary[3]. Simply throwing money at the profession is not going to solve this workforce crisis, culture change is needed. Let's stop celebrating long hour martyrdom to work, and instead hail the healthy habits of eating and sleeping well, valuing each other equally, and showing empathy and civility from the top-down.

Ivan Zakharenkov of Veterinary Integration Solutions said we need to train vets to become resilient, not to cope with the challenges of work, but to resist the constant pressure to take on extra work and stay late. We need to learn to set healthy boundaries and work within them, but to action this requires a practice culture where boundaries are acceptable. He reminded us how vital it is to develop a work environment and processes to keep vets happy, rather than one where 40% of vets said they want to leave practice within five years of graduating.

It's not just veterinarians who are in short supply, it is increasingly difficult to recruit and retain veterinary nurses and technicians who face the same workplace challenges, including poor remuneration and underutilisation of skills. Apryle Horbal of VetNow highlighted the need for tools to enable direct and indirect supervision to better share out jobs in the practice, helping to make the most of vet techs.

Amongst all of this remains the need for learning and skills development as a key motivator and contributor to job satisfaction. A structured way to develop goals often gets missed amongst the daily grind, as Victoria Johnson of VetCT highlighted. Performance support tools can not only help the individual to feel empowered and develop clinically, but feed into positive emotions associated with good outcomes for our patients and doing the job they trained to do; help animals. Combining live support from specialists with learning tools within the VetCT App is one solution to support self-directed learning and development of clinical skills on-the-job; earning while learning.

Key workforce facts from a survey by Ivan Zakharenkov of Veterinary Integration Solutions

» Takes 10 months to fill a vet vacancy in the US

» 45% clinics looking for 1.8 vets

» Revenue loss USD 1.8 million

» 40% of vets want to leave practice within 5 years of graduation

4 Time – optimising use of a precious resource

That most linear and non-recyclable resource of them all, time is precious and limited, and therefore our fourth Vetshot. Adoption of tools which proport to save time often require an initial investment to learn and implement. Innovative SaaS tools such as Talkatoo's dictation software, or Petsapp's owner communication platform require adjustment of habits and workflows, but once implemented they can create space in the calendar. Charlie Barton of Virtual Recall highlighted the importance of understanding existing workflows and illustrating how to integrate new technologies efficiently.

Where HGV drivers log and monitor hours rigorously for health and safety, HR teams would be wise to explore building in time-monitoring tools to our practices to ensure staff are getting adequate rest time to recover from work.

Vivet's Chris Tufnell pointed out vets can be conservative with a small 'c' due to paucity of time leading to caution over trying things which may not deliver an overall saving. Companies need to invest in trials with practices and iterating before commercialising products and services.

Practice groups such as US-based Wellhaven choose sentinel practices to trial new technologies prior to rolling out across to all members, while in the UK, Pennard Vets embed tech into daily practice life to capitalise on the time-saving benefits. The experiences and testimonials from early adopter practices will be key to dissemination of tools across the profession.

5 Integrating innovation – building effective solutions into workplace workflows

Our final Vetshot is not just about human creativity and the realisation of ideas, but integrating them practically into daily working practice. Vets are natural innovators, having to think on their feet. Many practices are full of improvised solutions created to fulfil practical needs. Where it has huge potential to do good, innovation is also hard to keep tabs on. The Royal College of Veterinary Surgeons has had to become a proactive regulator, second-guessing future potential development.

Innovations are often directed primarily towards the burgeoning market of the pet owner. Where wearable technology and home-based diagnostic monitoring systems have huge potential, vets are

also being asked to make decisions based on black boxes that may or may not be consistently providing accurate and reliable data... providing they are used correctly. Currently, as qualified professionals, vets and nurses are having to make decisions based on their own judgement where the evidence is frequently lacking.

With all innovation, listening to what clients want is key. However, business is going well so that appetite to innovate and gain customer insights is low when where we're inundated with the customer. The target for innovation becomes the practice. Pre-emptive communications, such as waiting room information, consultation tools and communication solutions are as much about assisting workflows as giving the client a better experience. Let's not rest on our laurels though – the tide may turn and the innovative practices best meeting client needs will be the ones enjoying continued success.

However, there remains the huge barrier of change fatigue to any alteration in everyday working practices. For example, a practice will wait on average for 15 years before changing its practice management system. It's a commitment almost as fatiguing as moving house. The silver bullet is the solution that has most
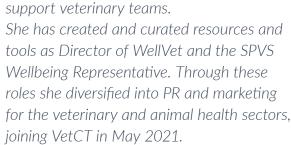
or all of the following characteristics; reasonably priced, easy to adopt, improves efficiency, aids learning, improves patient outcomes and fosters client loyalty. Boosted revenue, retention and reputation will follow.

Major challenges facing the development and subsequent adoption of truly game-changing solutions is the formation of ideas in silos, the noise of competing ideas, dilution of funding, the challenge of dissemination and driving adoption. Presenting at Kisaco events at the Innovation Showcases gives the opportunity to raise awareness, gain traction and raise funding and perhaps most importantly of all, network and collaborate. Such global events help to expand the funding potential by combining potential markets facing similar challenges worldwide. The Vetshots are global concerns requiring global solutions. Let's see what the future brings.

1. Prentis A. and Bonner J., 'Going Green.' Nov 2021, pp12-15, The Veterinary Edge

2. https://vetsustain.org/resources/vet-practice-checklist

3. Hagen, J.R., Weller, R., Mair, T.S. and Kinnison, T. (2020), Investigation of factors affecting recruitment and retention in the UK veterinary profession. Veterinary Record, 187: 354-354. https://doi.org/10.1136/vr.106044

About the author

Liz Barton is Head of Communications at VetCT. During a varied career in clinical practice, Liz developed a passion to support veterinary teams. She has created and curated resources and tools as Director of WellVet and the SPVS Wellbeing Representative. Through these roles she diversified into PR and marketing for the veterinary and animal health sectors, joining VetCT in May 2021.

Join us at the Petcare Innovation Summit, 7-8 December in Boston, as we continue these discussions. The Summit will be split across two content tracks covering the gaps we need to fill in veterinary health, diagnostic and screening tools enhancing pet health, the latest in wearables and tech, as well as diving into the biggest trends in petcare: personalization and wellness.

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