

The Future of Holistic Pet Care

Holistic healthcare is increasingly recognised and adopted by individuals and health services globally, as key to optimising human health and overall wellbeing. As we have increasingly humanised relationships with our pets, many of these approaches are being adapted and developed in the animal health space.

The Petcare Innovation Summit, May 18–19 2021, hosted a virtual panel of innovators at the forefront of developing holistic healthcare solutions for pets. It brought together individuals working in the fields of genetics, nutrition, precision pharmaceuticals and veterinarians to discuss the growing trend towards holistic pet care and how we can work together to ensure the optimum outcome for both the pet and pet parent. This article is borne from that discussion.

What is Holistic Care?

Where healthcare was historically restricted to limited medications dispensed by doctors, the word holistic conjured up thoughts of alternative and mystical therapies. However, the definition of holistic healthcare is the treatment of the whole person – in this case animal – taking into account the total of all influences on health including mental and social factors, rather than just symptoms of disease.

The Personalised Health Revolution

In recent years, we've seen the explosion of personalised health solutions for people, driven by innovation and our ability to gather data on a previously unimaginable scale. Greater understanding by the population at large of how our health is impacted by everything from how we breathe to what we eat has brought much of the control of overall health into the hands of the individual. This control is facilitated by technology, including the use of wearable devices and mental and physical health apps, to diet, microbiome, precision treatments and increasing awareness and attention paid to the drivers of mental and physical wellbeing.

Genomics and Pet Health

We have more genetic information than we have the time and capacity to analyse. This black box of data is set to inform our health management to an ever-increasing extent. Everything from conception via pre-breeding screening to precision treatment through genetic evaluation of specific tumours in the individual animal.

The sky is the limit as to where this could take us in the future.

Companies such as Wisdom Health and Basepaws are looking more holistically at the breed components, traits and genetic health factors, for individual animals. The advantage of comprehensive genetic screens for individual animals is the ability to tailor elements of husbandry and management to optimise wellbeing. Understanding the genetic make-up of your mixed-breed puppy can inform diet, exercise and socialisation regimens for optimal wellbeing. Basepaws is bringing genomics to the feline sector, which tends to lag behind canine innovations. They have developed a genetic test for identifying risk factors for dental disease, which is

one of the greatest causes of morbidity in cats, affecting over 50% of the population and extremely challenging to manage medically.¹ Taking a more proactive approach with preventative interventions and earlier treatment for high-risk cats could significantly improve their lifetime wellbeing.

One of the examples given by Wisdom Health is the detection of deletion of the pro-opiomelanocortin gene, which is linked to a tendency to overeat in dogs. Armed with this knowledge, we can proactively adjust feeding habits and diet from a young age to reduce risk of obesity – one of the most significant health issues of dogs today.²

Feeding for Life

'We are what we eat,' and in recent years we've seen a big increase in pet food options mirroring human health trends. Vegan, grain-free, organic, raw and home-cooked are all words increasingly used by premium pet food companies.

We are all aware of the advanced conversations around disease related to diet choices in human healthcare; for example, the consumption of high levels of processed foods or red meat predisposing to bowel cancer. These closely mirror the impact of diet on health in companion animals. The management of disease with prescription diets is well established as the mainstay of treating metabolic, renal and hepatic diseases.

The attention is now shifting to how we can optimise health through diets tailored to different breed types and age. Creation of individualised diets is becoming increasingly possible through online food platforms, which ask questions about health and signalment to create an optimised diet delivered to the owner's door. Combined with genetic testing, the power to optimise diet has huge potential to improve health over the lifetime of the animal.

Microbiome – the Micro-powerhouse of Health

Another area of rapid development is our understanding of the impact of the microbiome on health, through companies such as Microbiome Health LLC. Not merely gut health, but the immune system we're still discovering. Back to genomics, obtaining genetic data about what is going on with our microflora, and how that relates to health status, helps to inform how we can best use pre-, pro-, and post-biotics for prevention, health maintenance and treatment of disease.

Precision Therapeutics

As precision medicine is increasing options across the human healthcare sector, we're seeing a growing number of precision medications being developed in the pet health space. The advantages of more tailored treatments not only leads to better clinical outcomes, but also reduces side-effects compared to more generic medications. Potential for reduced dosing intervals with, for example, injectable monoclonal antibody therapies developed by companies such as PetMedix, means less pressure on the owner to comply with administering medications at home. This leads to easier management for the owner, maintaining the pet-owner bond. For the veterinarian, it has the potential to create more follow-up points with the owner, improve outcomes and therefore increase professional satisfaction and client loyalty. In some

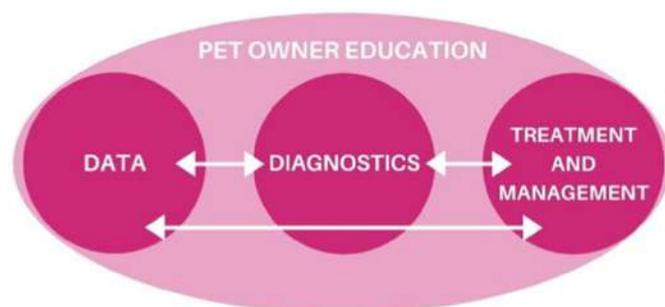
cases, precision medications may help to reduce antibiotic prescribing and improve sustainability.

Additional Holistic Interventions

Beyond the scope of this article, but deserving of mention, are numerous additional health management options to feed into holistic care. These include behavioural interventions, husbandry changes such as environment, and informing social dynamics. Physical therapies such as acupuncture and laser, and nutritional supplementation, are all areas of growth in the pet care market.

Data – the Driver of Future Pet Care Solutions

Data is increasingly feeding into diagnostics and informing increasingly optimised treatment and management options. Key to delivering all of this is collaboration on the part of the companies at each stage of the process, and education of pet owners to understand the purpose and benefits to both their pet and themselves.



Pet owners who are early adopters of tools aimed at providing a more holistic and preventative approach to their pet's health are already providing reams of data to inform better diagnostics and management options.

In addition, the growing emphasis on One Health opens the door to increasing data-sharing with the human health sector. Truly, this ability to capture data on such a wide scale provides us with an enormous opportunity to help explain value to pet owners and enable them to make informed choices. Where individualised precision healthcare may initially seem pie in the sky for the average veterinary client due to the expense, being able to make the equivalent preventative healthcare arguments for tailoring diet, microbiome and precision therapeutics to improve overall health, welfare and longevity for their pet becomes a compelling argument.

Education – the Key to Successful Delivery of Holistic Care

The challenge is to deliver this plethora of healthcare solutions in a co-ordinated, optimised and accessible manner to pet owners in a way which is understandable, affordable and actionable for their pet.

A nice example of this all being brought together is the Canine Arthritis Management platform, which drives a holistic approach by both vets and pet owners to this highly impactful and common health condition – including breeding, treatments, supplements, physical and alternative therapies, and exercise and environmental adjustments. Plus, a huge amount of educational material and support for owners. It would be great to see similar approaches emerging in a more co-ordinated manner for other major health conditions of pets.

This education piece inevitably requires a multi-channel approach in our increasingly online societies but is also a key role for veterinary professionals who are a well trusted source of advice for pet owners³.



The further evolution of digital solutions should aid time-pressured veterinary consultations by providing the tools and information to explain the benefits of a holistic approach to pet care. The veterinary sector is well-versed in economic arguments for the benefits of a preventative approach to farm animal health, regularly presenting the arguments of the upfront cost of, for example, vaccinations against respiratory pathogens, versus the costs of treatment and, more importantly, the unseen costs of lost growth rates and reduced productivity. This is a natural extension of that key role of the veterinary professional.

Collaborating is Key to Delivery

We have the potential to screen for and tailor everything from conception through to diet, microbiome, exercise regime and precision treatment. The potential impact of such an individualised and holistic approach offers great opportunity to positively impact animal health, welfare and the pet-owner relationship. This in turn improves the relationship with pet care providers. With initiatives like One Health, coupled with the large pharmaceutical companies bringing together start-ups delivering across this spectrum, we have the top-down leadership actively engaging with this process. Coupled with bottom-up leadership with animal health professionals and start-ups actively engaged in collaboration, we need to work together to prevent innovations developing in siloes.

The key to delivering holistic care optimally for the pet patient will take co-operation, collaboration and education. Thankfully, we have not only the tools, but also growing awareness and desire within the sector to facilitate this to an ever greater degree.

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Liz Barton graduated in 2004 and has enjoyed a varied clinical veterinary career. She is passionate about wellbeing in the profession and created the free online resource hub www.vetsnet.net in 2017. She has collaborated on a number of projects, including co-founding WellVet to host sports and wellbeing weekends. This year, Liz was voted onto SPVS board to coordinate the SPVS/MMI practice wellbeing awards. She works as Senior Account Manager for PR and marketing agency, Companion Consultancy, heads up the Veterinary Woman website and continues to locum as a vet.