

# Opportunities for the veterinary profession in the future of animal health

**Demand for animal health is growing worldwide and Rob Kelly, president of international operations for Zoetis looks at role of the veterinary practitioner in satisfying that demand and the opportunities that exist for the profession**

Demand for animal health is being driven by three fundamental trends: population growth; a growing middle class; and increasing urbanisation.

- The population is growing and the demand for more protein continues to rise. The role of veterinarians in helping farmers increase productivity to meet that demand will be even more critical in the years to come.
- Meanwhile, a growing middle-class has more money, with access to diets richer in animal proteins and a desire for the companionship of pets. With the help of veterinarians, this cohort are increasingly willing to spend their income on preserving the health and wellness of these companion animals.
- In addition, with more people living in cities versus rural areas, urbanisation is changing the way animal proteins are produced, what people eat in their diets, and how well people understand food production today. This is driving the consolidation of production to better support large urban centres and the need for better healthcare protocols to ensure safe and affordable food supplies.
- At the same time, being closer to animals, both pets and farm animals, can also increase the spread of zoonotic diseases. That, in turn, drives demand for medicalisation of pets and farm animals alike.

Together, these factors indicate that our dependence on animals will be even greater in the future and the role of the veterinarian will be even more critical than today. Veterinarians are providing increased veterinary medical services; helping farm animal producers improve productivity for a high-quality, safe and sustainable food supply. In this role, veterinarians are not only ensuring the health of animals but humans also. In the face of these future demands, there are several challenges that veterinarians should consider and have foremost in mind. For example:

- The ability to produce more protein in the face of constrained natural resources such as limited arable land and fresh water.
- Feeding the world while addressing climate change is one of the biggest challenges of the 21st century. The world's population, which reached seven billion in 2011, is expected to exceed nine billion by 2050. Agricultural production will need to increase by an estimated 70%, according to the UN Food and Agriculture Organization, with strong demand projected for commodities such as milk and meat.
- There will be challenges from diseases that threaten the health of farm animals and safety of our food supply.
- Increasing consumer influence is another challenge. The spread of online resources across social networks are empowering consumers to become more informed to ask more questions and to be better connected.
- When it comes to animal protein, consumers want to know where their food comes from and how it was made, demanding more transparency across the food chain.
- When it comes to pets, consumers want to know more about their pets' health and wellness. The wealth of information – and misinformation – available online and through other outlets can greatly influence consumers' perceptions and their purchasing.

The rise of digital tools and data analytics will become even more important for the veterinary profession to:

- Ensure accurate, targeted treatment;
- To make more informed decisions;
- To deliver more personalised and individualised care; and
- To better connect with your customers.

So, how can we convert these challenges into opportunities for the veterinary profession? How does the agri-food industry including pharmaceutical companies make that

happen together? There are three critical opportunities for veterinarians to deliver greater value to their customers and society in the future:

- First, by expanding access to technology;
- Second, by becoming more digitally versed; and
- Third, by adopting a more integrated approach to care.

Driving an integrated approach to animal health, veterinary and agri-food stakeholders are investing in innovation across the continuum of care for animals: from prediction and prevention to detection and treatment. This will require veterinarians to become more knowledgeable about the ways that genetics, diagnostics, digital tools and data analytics can improve animal health. It also requires increasing expertise in specialised areas of veterinary medicine which can further differentiate your practice. Let me share an example to illustrate this integrated approach:

- Looking at reproductive health in dairy cattle, we begin with genetic testing to predict which animals are less prone to post-partum diseases such as metritis and to determine which animals have a higher probability of becoming pregnant.
- Once you've helped the producer identify any reproductive risks and selected the healthiest animals for their herd, the next step is effective prevention and early detection.
- For example, as diagnostic test kits move from laboratories to the point of care, we are making it easier and more efficient for farmers and producers to identify sick animals.

With diagnostic data, you can then work with the producer to implement an individual health management plan with effective vaccination and biosecurity programme. Together, you can prevent the risk of disease moving forward, and implement the right treatment when needed.

#### **MORE INDIVIDUALISED MEDICINE THROUGH DIGITAL**

Another way we are facilitating communication between producers and veterinarians is through digital technology, as shown by the precision ear tag system (SMARTBOW).

Producers are using this to continuously monitor health and productivity in individual cows and their herds.

The technology provides real-time localisation, heat detection and health monitoring. It also helps to detect signs of stress or disease sooner.

In cases where the cow is sub-clinically ill, the data collected from the system can give you better insight for possible early intervention. While we can minimise the risk of disease through good prevention and detection, there is always the chance for illness, especially during the post-partum period. By using this integrated approach to animal care, with good prediction and prevention on the front end, followed by diagnostic and digital tools to monitor animal health, you can help reduce the use of antibiotics – and ensure timely and targeted treatment on the back end.

To address our second opportunity, how do you use big data and digitalisation to your advantage? These channels can help you increase traffic in your practice and build trust with a new

generation of clients.

There has never been a better time to connect with consumers and work more effectively together to manage the health of their individual animal. More and more veterinary practices are increasing their social media presence to stay present and relevant to a new generation of pet owners. It is important to be proactive in the age of the 'internet of things' to maintain your influence in healthcare, and to avoid other external players replacing your role – not only as prescribers but also in delivering products and services to your customers. Finally, is the opportunity to expand our access to technology. Working together, we can open doors to new markets and usher in the critical technologies needed to predict, prevent, detect and treat critical diseases. Recognising that the health of animals is connected to the health of people and the environment, we must support the veterinary profession globally to ensure that you remain at the centre of any medical decision. This includes the adoption of new technologies. We also see the opportunity to improve animal health and productivity in developing countries. One way to achieve this is through broad collaborations in some African markets – which are home to some of the largest livestock populations in the world. There, we are making great progress in establishing access to local veterinary services, diagnostics, medicines, vaccines and other animal health products. This will improve medicalisation rates, minimise the incidence of disease, and strengthen local veterinary expertise in areas where it does not exist today. In turn, this will greatly improve the livelihoods of local farmers. And, finally, it is encouraging to observe the efforts to elevate the veterinary profession around the world – by collaborating with professionals and academia to raise the standards of veterinary education, modernise treatment and grant wider, affordable access to veterinary care. In closing, it is important to emphasise enough the vital role veterinarians play in caring for animals and ensuring public health.

#### **CONCLUSION**

- For many, being a vet is much more than a profession. It's a passion to which you have dedicated your lives to make a difference for animal while also balancing the responsibilities of running a profitable business.
- Through an integrated approach to the veterinary practice, industry partners can help you succeed as a trusted animal healthcare professional and successful business owner.
- Working together, we can bring greater value to society through new medicines, technologies and insights that can improve the health and wellness of animals; enhance the sustainability of animal agriculture; promote the veterinary profession and advance the level of veterinary care around the world.