

VETFUTURES



Veterinary futures: the drivers of change

A review of the literature

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Introduction

The British Veterinary Association (BVA), the representative body for the veterinary profession, and the Royal College of Veterinary Surgeons (RCVS), which sets, upholds and advances veterinary standards, have joined forces to consider the issues that will face the veterinary team in the future.

Through a programme of research, engagement with the profession and the public, and a consideration of strategic issues that are having an impact on the profession today – and will continue to do so – the aim is to develop a plan for action that will help deliver the best for animal health and welfare, the public and the profession.

This literature review¹ provides a snapshot of the issues facing the veterinary profession in the UK today and what is known about their likely future impact. Where relevant, it provides insights from the veterinary profession overseas and from other sectors that may offer fruitful learning.²

Our focus when writing this paper has been to identify from the literature possible drivers of change. The review has also generated a few thoughts about the capability of the veterinary profession to respond to these – and areas where that might prove challenging. These we also draw attention to.

‘A concern with the nature and implications of change can be viewed as one of the few constants in the profession’s history’

Woods (2011)

¹ To frame the work of the Vet Futures project, a literature review of national and international literature (in particular, the United States and Europe) was undertaken, covering the period 2011-2014. The search strategy was to identify a mix of research studies published in peer review journals and grey literature on the future of the veterinary profession, innovations in veterinary practice, and changes with the potential to impact on the veterinary team. A handful of seminal reports from outside the search period were also considered.

² Searches were undertaken on the future of community pharmacy, dentistry and optometry.

Drivers of change

The literature highlights a number of drivers of change that are shaping the landscape for the veterinary profession. Some of these drivers can be expected to have an enduring or more pronounced impact on the veterinary profession in the years to come.

Six forces that are likely to shape the future for the veterinary profession are:

-  Demographic changes
-  Economic forces
-  An increasingly competitive market
-  Client behaviour
-  Food supply and global imperatives
-  Mental wellbeing

Beyond that, there are also a couple of provisos. The importance of legislative and regulatory reform as a key driver for change is acknowledged, but not examined in this review. The literature also highlighted issues pertaining to education. These are not covered here, in part because the future direction for veterinary medical education has already received considerable targeted attention – including the ‘Foresight report’ (Willis et al., 2007) and the ‘Pew report’ (Pew National Veterinary Education Program, 1989). Moreover, education is reactive to the needs of the profession, as laid down by directive and accreditation standards that are set and administered by the profession. Education will undoubtedly be pivotal to the response to the drivers of change and in enabling the profession to shape the future, but first there is a need to establish what the big strategic issues are and what impact they might have.

1. Demographic changes

A growing proportion of the veterinary profession in the UK is female. Of vets who are practising in the UK, 57% are women and 43% are men (Vet Futures, 2014). Furthermore, this gender imbalance is set to deepen. Just 24% of veterinary students starting their degree in 2012 were male (Royal College of Veterinary Surgeons, 2013), and the indications are that men working as vets are older on average than their female counterparts, which suggests that men will continue to retire in greater numbers than women *‘for the foreseeable future’* (Buzzeo et al., 2014). In the United States (US), it is anticipated that women will comprise 71% of the veterinary workforce by 2030 (American Veterinary Medical Association, 2013).

The literature highlights a number of worries about the gender imbalance, including: that female vets are more likely to work part-time; that women may be less willing to commit to partnerships and so leave practices vulnerable to takeover by large corporates (Spence, 2011); and that women vets tend

to practise for fewer years (Sheridan, 2011). However, the evidence suggests that the impact of the change in gender balance is often more complex.

For example, the number of vets working part-time has been increasing year on year. Buzzeo et al. (2014) found 19% of vets who responded to the 2014 RCVS survey of the profession were working part-time compared with 11% in 2000. Women were more likely to be working part-time than men. However, the proportion of men undertaking part-time work had more than doubled since 2010, and this was thought to be at least partly driving the increase in part-time working. What is clear is that the trajectory in part-time working will have implications for the number of vets needed to provide services, and working arrangements will need to accommodate increasing demands for flexible working from both men and women – a trend not limited to vets.

There is another feature of gender imbalance that requires better understanding. Women are much more likely than men to work in a veterinary practice as an assistant or employee, and less likely to be a sole principal, director or partner (Vet Futures, 2014). Some argue this reflects a wider societal reluctance by women to take on business leadership roles, and they highlight the case for vet schools to develop women’s business leadership potential and skills (Henry, 2014).

Women have been found to gravitate towards small animal, equine or mixed practice, whereas men lean towards farm and equine (Kinnison et al., 2013). The extent to which this explains trends in clinical practice is not clear. The number of vets employed in mixed animal practice and equine practice has declined, while the number working in small animal/exotic practice has increased and is expected to continue to grow (Buzzeo et al., 2014). A decline in the number of vets working for UK Government departments or agencies is reported, and this population is expected to remain static or decline further, reflecting budget constraints. A consistent trend is for vets to spend an increasing amount of time treating small animals, and allocating less time to the treatment of farm animals such as cattle (Buzzeo et al., 2014).

There is a suggestion that male applicants to veterinary schools are in short supply (Watson, 2011). This raises a question about the attractiveness of veterinary medicine as a career choice for men – which, in turn, raises questions about the financial and other rewards associated with the career. Four in ten members of the BVA surveyed said they *would not*, or were not sure if they would choose to be a vet again, reflecting disaffection with the rates of pay, long hours and stress (Alpha Research, 2014). Others have found that 46% *would* still opt for a veterinary career if they were starting out again (Buzzeo et al., 2014).

Another issue is that those people entering the profession are more likely to come from certain socio-economic groups. Almost a quarter of vets (24%) responding to the RCVS 2014 survey had been privately educated, and 30% had attended school outside the UK (Buzzeo et al., 2014). Efforts by universities to widen access to students from disadvantaged backgrounds (Andrews, 2012; Veterinary Record, 2013) may change the socio-economic profile of students in the future. However, working against this will be a combination of educational debt and low earning potential, which some argue makes a veterinary education a poor financial investment for most students (Downing, 2014). There

There are 25,830 registered vets in the UK, and 10,877 veterinary nurses.

Royal College of Veterinary Surgeons (2013a)

would appear to be gender issues here too – women in the US tend to report a higher average debt after vet school and to earn less than their male counterparts (*ibid.*, 2014).

There are also other changes afoot. Younger vets have embraced social media, for instance. Buzzeo et al. (2014) found that half the vets surveyed used smart phones or tablets for work purposes – where most aged 50 or over apparently did not – and a significant number reported using Facebook and LinkedIn for professional purposes.

The millennial generation not only use technology differently, but show signs of having different aspirations regarding their work-life balance – which will have implications for ways of working across the profession. This can already be seen in changes to the arrangements for out of hours: slightly fewer vets overall are today personally engaged in out-of-hours work; fewer vets report that their practice covers its own out-of-hours work; and more clinical practices are expected to use dedicated out-of-hours service providers in future (Buzzeo et al., 2014).

‘Of course veterinary practices don’t just sell and dispense products. We provide knowledge and advice and perform services and procedures. But the internet jeopardises that foothold too. In the past 10 years, the number of shoppers using the Web for information has doubled.’

Paul (2012)

2. Economic forces

The literature indicates that the economics of veterinary practice are under pressure in several ways. It is beyond the scope of this paper to provide a comprehensive overview of the economic forces shaping the profession, but some of the key pressures affecting supply and demand are highlighted here.

Supply

Where the US leads, the UK often follows. A number of economic forces are shaping the veterinary profession in the States, which may provide a glimpse of the future at home. One of the biggest of these is concern about the balance of supply and demand. The American Veterinary Medical Association (AVMA) reports that market indicators suggest excess capacity of veterinary services at national level (2013). The indicators of this include trends in the US of: falling incomes for vets; falling rates of productivity; and increased difficulty for new graduates in finding employment. Furthermore, slightly more than half of vets surveyed by AVMA indicated that their practices were not working at full capacity. The AVMA calculated that there was national excess capacity of 12.5% at current price levels for services. The magnitude of the surplus capacity is expected to range from 11% and 14% between 2012 and 2025 (equivalent to approximately 9,300 to 12,300 vets).

Under every scenario modelled, the supply projections in the US exceed demand through to 2025 – and these are likely to be conservative estimates. The AVMA report observes that high student debt and stagnating vet incomes in recent years mean that vets are unlikely to choose to reduce their average hours or retire earlier – again, adding to the problem. Excess capacity appears to be largest for equine practices, followed by small animal practices, food production practices, and mixed animal practices.

Concerns about an oversupply of vets in the UK are recurring in the literature (see, for example, Silpa et al., 2013). It has been suggested that the supply of small animal vets in the UK is 28% over capacity (Veterinary Record, 2014c). Some of the indicators of excess capacity identified in the US are also beginning to show through in the UK. In the US, vet graduates are reported to be getting fewer job offers and earning less in their first year of employment (AVMA, 2012). Similarly, here, vet graduates report increasing difficulty in finding work of the type they seek – although almost all of those surveyed had found a job within three months (Robinson and Buzzeo, 2013).

‘Two in every five practices changing hands today are bought by corporate groups. So, like it or not, corporate practice is here to stay’.

Nicol (2012)

Demand

The potential demand for small animal veterinary services in the UK would appear to be strong. Market data for 2013 indicated that there were approximately 8.8 million cats and the same number of dogs in the UK, and that 41% of households had at least one dog or cat (Veterinary Record, 2014c). The annual Pet Population report for 2014 estimates that 46% of UK households have pets – including fish and birds, as well as cats, dogs, rabbits and other small animals (Pet Food Manufacturers’ Association, 2014). These figures indicate that pet ownership has been steady since 2009, with estimates hovering at around 13 million UK households (Pet Food Manufacturers’ Association, 2012).

Yet pet ownership in itself is not an indicator of demand for vet care. In the US a decline in visits to the vet by owners of companion animals is reported (Brakke Consulting, 2011a). A number of factors are thought to underpin this, including the cost of care and pet owners substituting internet research for visits to the vet. However, the authors maintained that the most important finding is a *‘misperception’* by many pet owners that regular check-ups are unnecessary.

Even if demand in the UK were to remain steady, this might not be enough. Overcoming any excess capacity – if it is established that this is an issue for the UK – will need to rely on upping demand, according to the AVMA (2013). It suggests this is achieved through outreach programmes *‘to educate pet owners’* or *‘by removing access barriers’* or *‘reducing the cost to purchase services’*.

Others advise paying attention to price, the ability to pay, and to value (Felstead, 2012). This chimes with some of the UK literature, which raises questions about the amount pet owners in particular can afford to pay for veterinary services, amid rallying calls to gain a better understanding of clients and their spending habits.

Only around 15% of the 17 million cat and dog owners in the UK have pet insurance, according to the Association of British Insurers (2014). The average claim made on pet insurance is about £600, amounting to £478 million in payouts in 2013, mainly to cover vet bills for treating sick or injured cats and dogs (*Ibid.*, 2014). The potential of untapped premiums arising from uninsured pet owners in the UK has been put at £2.5 billion (Defaqto, 2011). Whether this potential can be realised however, will rely on a greater public acceptance of the value of pet insurance.

Conditions for the providers of pet insurance are becoming more challenging. The uptake of pet insurance is reported to be declining, whilst the number and size of claims has been increasing (King,

2011). Between 2007 and 2012, the average claim paid rose by 52%, up £207 – much more than the £57 rise in the average pet insurance premium (Association of British Insurers, 2013). The average UK vet bill is put at over £300 with some more complex treatments costing more than £4,000 and ongoing conditions costing up to £10,000 (*Ibid.*, 2013).

In the US, veterinary leaders have described the profession as being at ‘*tipping point economically*’ and have voiced concerns about the state of the industry (Burns, 2013). Pet owners are perceived as spending a great deal on their pets, but very little on veterinary care, reflecting a lack of understanding of what vets can offer compared with others in the lucrative pet market.

‘Failure to evolve means extinction, so both the present owners and future generations must make the leap to allow practice ownership to evolve in the next part of the 21st century’.

Wright (2011)

Indeed a recurring message in the literature is about vets communicating value – both as a qualitative concept of what they can offer, and also in terms of value for money. One US study reported that 95% of vets believed that dogs and cats require at least one ‘*wellness examination*’ annually. Yet, at the same time, 65% of vets thought their clients did not value these checks (Brakke Consulting, 2011b). Another US survey found that – while pet owners were generally happy with their vet practice – they identified a lack of association between the value and price of services. ‘*This is not a sustainable situation; ultimately consumers of any kind will drift away from a business in which they do not find value. The clear message is that veterinarians and their teams need to significantly improve communication with their clients regarding value of services*’ (Felstead, 2012).

The cost of care is a concern for clients in the US where 76% of fees were reported to have increased above the rate of inflation between 2004 and 2006 (*Ibid.*, 2012). The same study found that more than a quarter of pet owners were looking for a less expensive veterinary option, and less than half were firmly committed to staying at their current vet practice, regardless of price. Other sectors face similar trends. For example, it is reported that American consumers are becoming more astute purchasers of dental care and are increasingly seeking value for their spending (Diringer et al., 2013).

The ability to pay is critical. The US survey of pet owners found that about 69% of practices reported an increase in the number of clients asking for alternative payment methods (Felstead, 2012). Other payment mechanisms that have been mooted in the UK include payment plans for expensive treatments, private healthcare plans and loyalty schemes, as part of supporting greater openness and transparency about the costs of services (Veterinary Record, 2014d).

Some of the literature from the UK highlights issues about how services are priced (see, for example, Veterinary Record, 2014a). Subsidisation of the cost of services – through the sale of pet health products and animal health medicines – is a specific concern, not least because of the threats to these markets (see below). There is a recognition that the pricing of veterinary services has to change, and especially that practices need to a) be more transparent on pricing and b) charge more appropriately for services rather than relying on product sales (Veterinary Record, 2014e).

3. An increasingly competitive market

Vets provide a range of services in a number of settings. However, the most significant segment of the market, in terms of revenue, is the provision of services to pets and farm animals. Most important of these is the provision of vet services for pets, which accounted for 45% of industry revenue in 2014-15 (IBISWorld, 2014). The literature highlights a number of factors that have already changed this market and are expected to continue to shape the landscape for the foreseeable future. Principal amongst these factors is intensifying competition, which reflects a consolidation of the market, new channels of supply, and encroachment from other sectors.

Market consolidation

The ownership of clinical practices is changing. A gradual but clear decline in the number of practices set up from scratch by independent vets is reported (Wright 2011). Any new practices that do spring up, generally, are part of chains.

Corporates and charities currently comprise about 25% of practices and some predict that corporates will plateau at approximately 50% of market share (Veterinary Record, 2014a). The literature highlights a range of opportunities arising from corporate practice and the expansion of group clinics. For example, corporate practice is credited with offering centralised administrative structures that lessen the burden of running a practice, although the downside of this is that it can lead to vets feeling disenfranchised from decision making (Nicol, 2012).

Some expect the expansion of referral-only practices to be limited, as larger general practices become able to offer some referral services within their group. Visions for the year 2023 include general practice diverging into training hospitals and well-equipped practices, alongside *'cheap and cheerful'* clinics offering a handful of services, such as vaccination and neutering (Veterinary Record, 2014e).

Box A outlines the experience of market consolidation by three other sectors offering regulated professional services and which have traditionally been characterised by small or medium-sized private businesses owned either by an individual or a partnership. The impact on pharmacy has been particularly pronounced – with predictions that the profitability of pharmacy could decline by 38% on average and that independent pharmacies will be particularly challenged, *'with a very real prospect that up to 2,000 outlets could be closed'* (A. T. Kearney, 2012). This in turn presents a threat for the veterinary market – see *'Encroachment from other sectors'*, on page 9.

One lesson that can be taken from these other sectors is around the need for independent practices and small chains to differentiate their position from large corporate practice by providing personalised, responsive services, tailored to local priorities, and to focus on building a loyal client base. One of the strategies recommended for community pharmacy – and which may have relevance for vets too – is to strengthen the role of services in their business mix (as distinct from the supply of medicines). Determining the services valued by target customers, and what they are willing to pay for, is considered a vital component for independent pharmacy (Singleton and Nissen, 2013). It could prove just as vital for vets.

A theme from the literature is the business acumen of vets and their capability to give energy to marketing and business development. Historically, little attention has been given to training business skills, knowledge and attitude as part of the undergraduate education. The Lowe report (2009) highlighted a need for the veterinary curriculum to better equip the next generation of vets with, amongst other things, business skills. Other literature lends support to the idea that teaching business and finance skills should be a component of the curriculum. For example, Bachynsky et al. (2013) found that recent veterinary graduates and their employers rated graduates' preparedness and competence in early career business skills as poor to average – yet these skills were regarded as having average to high importance. They also commented on the difficulties faced by new graduates in client communication (generally and financially), and in having the confidence to charge clients appropriately for their services. The indications are that vets need to grow, in terms of business skills development.

'Veterinary business educators need to focus on 'integrating' rather than 'inserting' business skills into the curriculum. They also have to be particularly mindful that women have a different perspective on business leadership when compared to men...'

Henry (2014)

[New channels of supply](#)

The UK animal medicines market is worth – depending on the source – somewhere between £530 million (Chemist and Druggist, 2014) and £562 million (National Office of Animal Health, 2014). It is reported that over half of animal medicine sales are for companion animal use, and 10% of these medicines are available without a prescription (Chemist and Druggist, 2014). Internet pharmacies have been keen to capitalise on this market by selling products more cheaply and providing the convenience of door-step delivery to the consumer.

Liberalisation of the online and mail-order pharmacy market for human medicines has varied across Europe with Germany, the Netherlands, Sweden and the UK reported to have been leading the way for new licenses (A. T. Kearney, 2012). Germany alone is reported to have 1,500 licensed online and mail-order contractors in operation. Growth in the number of internet licenses in the UK is reported and the UK is attributed with having the largest online retail market in Europe (*Ibid.*, 2012). In the light of this, expansion of the animal medicines market online seems inevitable – although proposed European veterinary medicine regulations may dampen the growth of this market.

[Encroachment from other sectors](#)

Internet pharmacies are not the only ones clamouring for a slice of the lucrative animal medicines market. Community pharmacy is also set to get progressively more involved here.

The pharmacy market for human medicines grew at only 1.4% in 2012 (Retail Week, 2012), and the search is on for pharmacists to look for new revenue streams. Community pharmacists have found that selling pet health products can make a significant boost to sales and profitability – and there are moves to extend their reach into pet health products (Chemist and Druggist, 2014). Pharmacists will find no shortage of encouragement to enter this market (The Pharmaceutical Journal, 2013; Chemist and Druggist, undated), and are supported by the provision of dedicated postgraduate courses (The Pharmaceutical Journal, 2011). For one pharmacy group, comprising 65 pharmacies, veterinary

medicines comprise the third biggest over-the-counter sector after pain relief and cough and cold remedies, and 10% of its veterinary sales are prescription only (POM-V) products (The Pharmaceutical Journal, 2013).

The opportunity for pharmacy – and the threat to veterinary practice – is all too clear: 60%³ of pharmacy customers are thought to own a cat or dog (The Pharmaceutical Journal, 2013); 99% of the population is able to get to a pharmacy within 20 minutes by car and 96% by walking or public transport (Department of Health, 2008); and around 1.6 million people visit a community pharmacy every day (Central Office of information, 2008). Furthermore, given the threats facing the pharmacy market itself, this is an area that they are unlikely to hold back from. Advice to pharmacists is to think about supplying veterinary prescription medicines – not just pet health products – and to keep in mind that they *‘know a lot more about the drugs than most vets ever will’*. They are encouraged to place the emphasis on competitive prices, the convenience of pharmacy and the offer of a one-stop shop for the whole family (The Pharmaceutical Journal, 2013). The threat to vets is real.

³ Note, it is not clear how this figure is calculated, but other sources put the number of UK households with a pet at between 41% and 46%.

Box A: Consolidation within comparable markets

Pharmacy

Community pharmacists operate in what has become a *'ferociously competitive marketplace'*, where the combined share of large chains and supermarkets was reported to be at 52.5% in 2011 (A. T. Kearney, 2012). **The proportion of pharmacies in England owned by multiple contractors (owning six or more pharmacies and including large chains such as Boots and supermarkets) was 61.3% in 2012** (The Health and Social Care Information Centre, 2012). That figure is up from roughly 41% in 1997-98 (House of Commons Library, 2009). Entry into the pharmacy market has been regulated since 2012 by the Pharmaceutical Needs Assessment. However, some speculate that this could be *'too little too late for the independent sector'* (A. T. Kearney, 2012). In 2012, 39% of pharmacies in England were classified as 'independent' (contractors with five or less pharmacies).

Optical

The opticians market has been facing challenges, and particularly for smaller independents. The growing dominance of multiples and encroachment by supermarkets has seen the market share for independent optical practices fall to just 28%, down from 41% in 2010 (Independent Practice Growth UK, 2014). Similar themes surface about **increased competition, the power of mass players, increased consumer confidence with online purchasing, and consumer desire for greater price transparency on products** (Spaulding, 2012). A recurring message from the literature for this market is about **sustainability for smaller independents arising from their ability to offer high levels of customer services, as well as expanding the range of services on offer.**

Analysis of people's attitudes towards where they choose to buy eyewear has revealed three main target groups – 'optician loyal' (46%), 'tempted by savings' (32%) and 'uncaring' (22%). The first group were least likely to use online shopping and to value check-ups. Marketing to this group should reinforce the relationship with their optician, whereas marketing to the group attracted to savings should emphasise the fair deal on prices (Optician, 2014). The literature suggests that vets do not yet have a sophisticated grasp on their consumer markets and how to target them.

Dentistry

Dental practices in the UK are typically either small or medium sized private businesses that are owned either by an individual or a partnership of dentists, or are owned by a corporate dental group (operating three or more practices). Restrictions on the ownership of dental practices by corporate dental groups were relaxed in 2006 (although the majority of the board directors must be dentists or dental care professionals), leading to an expansion in the corporate dental sector, which was estimated to account for around **10 per cent of the dentistry market in 2010** (Office of Fair Trading, 2012). **It has been estimated that corporate dentistry has grown by 85% between 2003 and 2010 and will account for a 'sizeable and growing share' of new or newly taken over practices** (General Dental Council, 2013). Reactions to greater corporatisation in the dental world have been similar to that for veterinary, with upsides including greater investment in technologies and more support and protection for dentists, and downsides being a possible reduction in professional autonomy (General Dental Council, 2013).

4. Client behaviour

Consumer behaviour is changing and the rise of the ‘convenience culture’ is a key driving force. Even this, though, is constantly evolving – for some, convenience is no longer the ‘one-stop’ out-of-town type. Some resurgence towards local high street services is predicted (Wrigley and Lambiri, 2014) – good news for those vets who operate out of the high street. Consumers are described as ‘increasingly digitally sophisticated’ and ‘time-constrained’ – characteristics which have led online sales as a proportion of total retail spending to more than triple from 2007 to 2014 (*ibid.*, 2014). Nearly all vets responding to one survey reported seeing clients whose behaviour had been influenced by what they had read on the internet – information which vets were likely to regard as unhelpful (Alpha Research, 2014).

‘Consumers increasingly value authenticity, traceability and ethical sourcing’

Wrigley and Lambiri (2014)

The internet is awash with reports heralding the four, six, eight trends that will shape consumer behaviour in the coming year. Common to these is an enduring appetite for digital and technological advances and, in particular, portable devices like phones and tablets, to meet the needs of an instant gratification culture. Other cultural shifts include a growing ‘mindfulness’ and seriousness about ethical responsibilities, as well as towards increased personalisation, and products and services that are tailored to meet consumers’ demands and expectations (Barkworth, 2014). Customer service remains king and consumers are reported to have a greater willingness to reward excellent customer service, through higher spending and word-of-mouth recommendations (American Express and Ebiquity, 2014).

The relevance of this for vets is that the way clients seek to engage with their services – and the aspects of service they value – may well be changing. Some of the literature indicates that there is already a disparity between what some clients want and what vets are providing. Hall et al. (2012) found that, whilst farmers and vets agree on the three primary functions of the vet on a farm, farmers were unaware of some of the services vets could offer. Also, while vets wanted to position themselves as ‘friend’ to the farmer, farmers tended to place value in having a proactive vet who could provide sound technical advice. Similarly, significant differences have been identified between the attributes of ‘a good vet’ most valued by pet owners and those considered important by vets themselves (Mellanby et al., 2011).

Other studies suggest that vets are even losing business by a failure to meet the needs of the client. For example, Kaler and Green (2013) conducted a study of sheep farmers and found that the key barriers to using vets proactively were: inconsistent service; high turnover (of vets); lack of expertise of sheep farming; and concern about independence of advice. In addition, there are clearly times when vets do not feel confident in their ability to meet their clients’ needs. For instance, Roshier et al. (2012) found that vets sometimes lack confidence in their own skills in providing behavioural advice to pet owners, or are uncertain where to refer people for more specialist advice. Most felt their skills did not match client expectations.

The Lowe report (2009) challenged the profession to renew its relationship with farmers, amid revelations that farmers want vets to provide services that meet the broader needs of their business.

This message is echoed across the literature: there is a necessity for vets to better understand – and respond to – the needs of clients. This includes ensuring that the offering is responsive to the different wants of clients and clearly articulated (Gabay et al., 2014). The importance of this is reinforced by a study of public expectations carried out on behalf of the RCVS (MG&A, 2014). The study found that the three main criteria for selecting a vet practice were: proximity; standard of care; and personal experience. The priority given to these criteria, however, differed for pet owners and equine owners. The expectations of these two types of owner were distinct in other ways – for example, equine owners were prepared to travel further than pet owners for vet services, and to pay more for treatment out of hours.

It can be inferred from the literature that one of the fundamental drivers underpinning veterinary services may need to change – from a model driven by what vets are prepared to offer, to one that is driven by the needs and wants of existing and potential clients. The UK health sector may provide a useful comparison here. The literature considering the future for healthcare tends to use the needs of the end user as its starting point, and the medical profession has, over time, moved from service-led models to user, or client-led approaches.

Repeated reference is made in the veterinary literature to *'more responsible'* pet ownership, and the language is suggestive of a somewhat hierarchical model with the vet as the expert imparting instruction ('do this', 'don't do that'). In the UK health sector, by contrast, emphasis has been placed on a shift in power from paternalism to partnership (Foot, 2014) and for a more engaged relationship with users of services and the public in order to promote wellbeing and prevent ill-health (NHS England, 2014). The language used to set out the ambition for NHS services is about *'empowering patients'* and *'engaging communities'* and *'incentivising and supporting healthier behaviour'*. Some of the language in the veterinary press – for example, reference to the *'need'* within the industry for *'compliant pet owners'* (Veterinary Record, 2014a) – suggests that genuine partnership working between vets and clients, and specifically pet owners, may be some way off.

Other professions are also seeking to make consumer expectations the key drivers of their approach to both regulation and service provision. For example, the General Dental Council has committed to making consumer expectations central to its approach to regulation – at the same time as exploring social media platforms as a resource for patients hungry for more information about dentistry generally (General Dental Council, 2013). Similarly, in community pharmacy, there has been a drive to offer a more personalised familiar service, and to help patients specifically with managing long-term disease (Retail Week, 2013).

The importance of a client-driven approach is reinforced by a recognition that the ability to demonstrate responsiveness to the needs of clients is critical to the future success and sustainability of independent practices. Knowing what clients want and need, and how much they are prepared to pay for this, are important. The literature indicates that this is an area to which vets need to give more attention. Client surveys are suggested as a simple way forward (Felstead, 2012). The

framework used by the Office of Fair Trading (2010) to evaluate the impact on consumers of pharmacy services may also be of relevance. This looked at eight dimensions of customer experience: proximity, opening hours, waiting times, convenience, range, price, advice and expertise, and quality of services.

One of the most important factors that will underpin future client behaviour is trust in, and respect for, the profession. Here, at least, the picture looks positive. A three-country public opinion poll found that vets are amongst the most respected professions in Canada, the US and Britain – 86% of Britons surveyed had a ‘great deal’ or ‘fair amount’ of respect for vets (Angus Reid Public Opinion, 2014). Factors found to influence trust in vets are perceptions of professionalism and the ability to communicate medical and diagnostic information openly and honestly (Grand et al., 2013). This US study found that student vets who exhibited behaviour reflecting these factors, and who were perceived as being more technically competent, were seen as more trustworthy.

The literature indicates a real need to define (Mossop, 2012) or redefine interpretations (Roder et al., 2012) of what veterinary professionalism really means in this day and age. What appears to be key here is developing an understanding of the challenges posed by the future for professionalism. For example, the ways in which dentists in the US may be tempted to violate client trust are expected to increase as funding mechanisms become more complex. Building *‘ethically correct decision-making relationships with patients’*, whilst also maintaining a successful business, is argued to be the single biggest challenge to dental professional ethics today (Ozar, 2012). Demonstrating an ethical approach in charging for professional services is likely to increase in importance – and there is some evidence that other professions are struggling to keep up with what this means in practice. One in five patients in England surveyed by consumer group Which?, had been overcharged for dental treatment and 50% said no price list for treatment was displayed (BBC News, 2015). Vets are likely to face similar dilemmas. As they grow more business-minded, will their ethical integrity come under threat, or suspicion?

Page-Jones and Abbey (2015) observe that *‘some veterinary professionals equate being a commercial organisation with being unethical’* and are likely to enter the profession with a distorted view of modern industry and a professional identity that is incompatible with it. This is a challenge that the profession will need to confront, given the increasingly commercial market environment and, arguably, the needs of clients for vets to become more commercially astute.

‘It is the profession itself that has most at stake, and it must demonstrate that it is indeed the protector of the health and welfare of food animals. To do so, it must speak with a unified voice and be mindful of its role, not just as a provider of private medicine for companion animals but as a guardian of the nation’s health’.

Liddon et al. (2011)

5. Food supply and global imperatives

Big global issues – including climate change, bioterrorism, antimicrobial resistance, food supply and security, and transboundary disease – are amongst the issues that the profession highlights as demanding its focus. Attention is given to the ‘One Health’ concept (Gibbs, 2014; One Health Initiative, undated; Burns, 2012), and to vets getting on-board not only with the human element of animal disease, but the potential contributions of the profession to debates about human healthcare delivery (Veterinary Record, 2012).

The role of the profession in addressing these global issues is clearly made out. The Food and Agriculture Organization of the United Nations emphasises the role of veterinary public health in feed and food safety – and the paramount importance of this for the protection of human health and for enhancing quality of life worldwide (Food and Agriculture Organization of the United Nations, 2015). This is reinforced by the role of the Office International des Epizooties (OIE), a veterinary-led organisation, which sets the standards for trade in animal products via the World Trade Organisation. The OIE assesses the quality of veterinary services within a country (OIE, undated), against a set of core competencies that are mostly related to animal production (OIE, 2013).

By 2050, the world’s population is expected to grow to 9.6 billion (United Nations, 2013). It is also predicted that global demand for meat is likely to increase by the middle of the century (Foresight, 2011). Taken together, these predictions point to an increase in demand for veterinary services at a global level.

Closer to home is a range of issues about surveillance of disease, and the need for the profession to maintain its capability to protect animal health and welfare issues. Specific issues include bovine TB, antimicrobial resistance, compulsory microchipping, horse passports and the proposed European Animal Health Regulation (Gibbens, 2013). Concerns extend to finding vets for sparsely populated areas and changes in agriculture (Lowe 2009). Changes in the farming sector, and in the veterinary practice that serves farm animals, together, are identified as posing challenges for the future sustainability of farm animal veterinary practice (Henry et al., undated).

Kelly et al. (2013) highlight the opportunity for vets to become ‘*a pivotal force in overcoming many aspects of food insecurity by improving the health and economic prospects of millions of small livestock farmers*’. Veterinary expertise at multiple levels is called for – especially at formulating and implementing policy. This is where one of the key challenges for the future appears to arise. Kelly et al identify an ‘*extreme paucity*’ of vets involved in strategic planning in US agencies for international development and a lack of awareness in all that veterinary medicine has to offer. The engagement of the veterinary profession in food policy development is seen as crucial.

Much of the literature implores the profession to assume a bigger profile on these issues, to become more engaged and to evolve as fundamental partners in addressing food insecurity and issues that

‘In collaboration with specialists from other disciplines, the veterinary profession has an opportunity to help poor countries sustainably meet their demand for foods of animal origin. However, too few people are aware of all that veterinary medicine has to offer, and as a result, the profession does not receive adequate support’.

Kelly et al. (2013)

strike to the heart of global human interests – poverty and hunger. There is some evidence of efforts to increase awareness amongst vets of their potential here. For example, ensuring that the undergraduate veterinary medicine curriculum gives proper attention to the role vets can play in such issues as food security, efficient and sustainable production, control of animal disease and zoonoses (Maud et al., 2012). There has also been debate about how vets might respond to the challenge set out by Philip Lowe (Lowe, 2009), that the profession should be clearer and more assertive about its offering with regards to public health and food assurance (Clarke and Jones, 2011).

Getting a foot in the door in terms of policy formulation would appear to be a potential stumbling block. Changes in the roles and responsibilities of Government and vets with respect to animal health and food animal production are cited as having *'major implications for the public role of the veterinary profession'* (Enticott et al., 2011). The creation of agencies has, it is argued, made vets more remote from policy making – left instead in full-on delivery mode and with a sense that their influence on policy has been diminished. Another consequence highlighted by Enticott et al. has been to concentrate the supply of certain veterinary skills in a few external organisations. This has left the profession feeling *'denigrated and marginalised from policymaking'* (Roder, 2011).

There are those who argue that concerns for the future of the veterinary profession are nothing new and that *'even apparently unprecedented changes in the profession's structure, roles and relationships can mask broader historical continuities'* (Woods, 2011). Nevertheless, there would appear to be opportunities to increase the profession's participation and engagement in issues of relevance to animal and human health.

Aside from delivering the public good, there is another imperative for vets to be seen to take an active role. That is, to enable the profession to reinforce its role in society, which is seen as essential to maintaining its professional standing (Liddon et al, 2011). Other professions have looked to increase their influence and activity in public health as a means of fortifying their standing more generally. For example, a broader role for pharmacists as *'caregivers'* is regarded as central to securing the future for community pharmacy (Smith et al., 2013).

The lack of an evidence base on which to make clinical decisions appears to be an issue. It is argued that the veterinary profession is lagging behind the medical profession when it comes to having the requisite evidence – with a paucity of systematic reviews and reliable studies in the veterinary evidence base (Veterinary Record, 2012). There are calls for vets to step up to the challenge of undertaking research in order to build the evidence base, so that the research vets do reflects what happens in day-to-day practice (Lanyon, 2014). Therefore, if more vets were to undertake case-based or practice-based research, it would complement data gained from academic veterinary research.

It is claimed that the UK has a highly efficient research base in the veterinary sciences, and that veterinary research has a part to play in the major challenges that the world is facing. These include: addressing inefficiencies in the food-chain; helping to address national food security; mitigating the impact of animal disease; improving food animal welfare and tackling climate change (Royal College of Veterinary Surgeons, 2013b). Evidence that veterinary research funding tends to have a reactive approach, rather than a proactive strategic outlook, is reported (*Ibid.*, 2013b). In the context of *One Health* and the global challenges highlighted above, there is a strong case for the funding of veterinary research taking a long-term strategic view – one that stretches forwards by decades. It is

argued that veterinary surgeons *'have a remarkable role to play'* in addressing these challenges and that they need *'proper academic research underpinnings'* in order to do so (*Ibid.*, 2013b). Achieving this, according to the RCVS Research Subcommittee, requires the UK *'to ensure that its veterinary research base is equipped and dynamic enough to carry out its important mission'*.

6. Mental wellbeing

Levels of stress in vets, and their perceived higher propensity towards suicide, receive considerable attention in the literature. Yet research suggests that vets are no longer at most risk of suicide compared with other professions. Further, while the most recent RCVS survey found that nearly 90% of vets considered veterinary work to be stressful, it was also the case that a similar proportion said it provides variety and over 80% reported job satisfaction (Buzzeo et al., 2014). As with other drivers of change, the factors that influence mental wellbeing – and its influence on the profession – are continually evolving.

A number of studies have tried to develop an understanding of the wellbeing and mental health status of vets in the UK. For example, over half of vet students in one study had experienced mental ill-health (mostly before attending veterinary school) and their wellbeing was judged to be significantly poorer than for the general population, but similar to estimates for qualified vets (Cardwell et al., 2013). Others have tried to explore the factors associated with suicidality in the profession (Platt et al., 2012a).

Looking ahead, changes in the profile of the veterinary profession – and, specifically, the increase in women practising – may be relevant in the light of research from the Netherlands, which found that male vets were less exhausted and more engaged than female vets (Mastenbroek et al., 2014). Of greater concern to the authors was the discovery that one in seven vets suffer burnout within the first ten years after graduation, and that one in five female vets meets the criteria for burnout in their first five years after graduation.

Falling salary levels and increasing student debt could also be factors moving forward. Where vets once ranked first amongst occupations with the highest suicide rates, that risk has dropped considerably. They no longer rank among the top 30 occupations with the highest suicide rates (Roberts et al., 2013). Socio-economic forces now seem to be a major determinant of high occupational suicide rates in Britain, with significant increases seen in suicide rates among manual workers. While this research indicates positives for the veterinary profession in general, could growing financial stresses be a worry for the future?

The difficulties that have been identified as contributing to mental ill-health in vets practising today include: managerial aspects of the job, long working hours, heavy workload, poor work-life balance, difficult client relations, and performing euthanasia (Platt et al., 2012b). A question for the Vet Futures project will be to consider how these contributory factors may alter in the future, and what interventions may be necessary to mitigate their impact on the mental wellbeing of vets.

Proactive approaches to managing workplace stress in veterinary practice suggested by the literature include regular appraisals for all members of the vet team, as well as the importance of personal and development plans (Field, 2011). Such measures lend themselves to corporate practice, which tends

to be better equipped in terms of human resources infrastructure. However, the advantages cited for small independent practice, in terms of a personal approach for customers, may also reap dividends when it comes to supporting members of the team.

Any profession that feels under pressure and consumed with the demands of daily practice will inevitably find it harder to devote energy to scanning the horizon and taking hold of its future. Fewer than 30% of vets who responded to the 2014 RCVS Survey reported that they often had energy to spare and felt relaxed (Buzzeo et al., 2014). This is perhaps one of the biggest challenges for the profession – underlying some of the literature is a need for vets to step up and engage in discussions about issues affecting the future. Professional isolation – one of the factors often associated with stress amongst vets – only compounds the problem.

Securing the future

It can be hard to talk about the future: even as we try to do so, it is upon us. What this review does seek to provide is a baseline of what is driving change now.

This snapshot of the literature suggests that:

-  The veterinary profession is acutely aware of the changing environment, and the need to embrace the future
-  This future involves a need for openness to: more flexible working; a compassionate approach to the stresses inherent to the job; and the need for an evolving skills set
-  An understanding of clients' changing requirements is fundamental to the success of future business models – it would appear that vets do not yet have a sophisticated grasp on their consumer markets and how to target them
-  Client-led approaches and a new relationship between vets and clients – from paternalism to partnership – might stimulate new markets and support the agenda for both
-  There is a big global veterinary agenda, and some prioritisation is needed. Stronger engagement by UK vets in issues of animal and public health, or 'One Health', is important for the public good, and to maintaining professional standing. The more this happens, the greater the likelihood that vets in the UK can have a positive impact on the bigger global picture
-  There is work to be done on understanding how this brave new world may impact on professional integrity, and perceptions of professionalism – both across the profession and wider society

Exactly how the drivers of change will shape the future of the veterinary profession is undetermined – and something the Vet Futures project will seek to explore.

The literature provides some insights into the capability of the profession to respond – but it also underlines vulnerabilities. Notably, it provides few insights regarding how vets are embracing change – for instance, by seizing opportunities to grow their businesses differently. This highlights a need to find ways to identify innovators within the profession, to capture and disseminate learning, and create momentum around novel ways of working. It may also mean finding new ways to encourage and nurture innovators at different stages of their careers – from students and fresh graduates, to experienced veterinary surgeons.

The profession will need to give consideration to what capabilities are required to respond effectively to the drivers of change. An area where the UK literature was relatively quiet was with respect to leadership, yet the literature also indicates that the leadership task ahead is a significant one. This may suggest that insufficient focus has been applied to leadership within the profession, or that it has

not been prioritised. Leadership from within the profession, alongside input from Government, regulatory bodies and others, will be a key enabler to ensuring the future sustainability of the veterinary profession.

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