

Software developed to make calculations more accurate

True costs of disease

Estimating financial losses from disease and assessing the benefit of preventative health practices is set to become easier and more accurate due to a new disease cost calculator being offered by the British Cattle Veterinary Association (BCVA) this winter.

The calculator is effectively a bolt-on costings module to the association's existing health plan software, currently being used by 700 vets in 300 practices, which cover around 80 per cent of the livestock in the UK. For the first time the all-important element of disease-related profit and loss will be introduced into health planning, thus overcoming one of the major limitations of the existing approach, says the association.

Estimating disease costs has been an inexact science, largely based on taking average figures and then trying to apply them to an individual farm situation. With the new program farmers and vets will be able to input a farm's actual level of performance, its specific disease incidence levels and severity, any resulting loss of milk yield or quality bonuses, mortality or culling incidences, and the vet fees and drug costs used in treatment.

The calculator will then put an accurate cost on the particular health or disease problem on that farm. Conversely, the cost of a preventative vaccination policy can be assessed and compared to determine a precise cost:benefit figure for the farm, says the association.

"The new software means health planning has come of age," says the program's writer Pete Orpin, a practicing large animal vet from Leicester. "Original health plans were initially introduced to meet core farm assurance requirements, but since then they have become useful tools in the identification, tracking and control of disease problems. The new module takes all of this one step further to put financial figures on the cost of disease and the benefits of treatment."

The module uses figures on

During a period when margins in farming have become tighter and tighter, it is important to identify costs as accurately as possible. Disease can represent a major cost to the farmer, but the actual cost has always been difficult to quantify. New software that has been developed by the British Veterinary Cattle Association sets out to tackle this problem.

disease costs taken from the widely respected work of Reading University researchers Dick Esslemont and Mohamad Kossaibati, originally of DAISY. Standard targets and costs in the program were set, based on their figures. For fertility these were a 365-day calving index, a 6 per cent failure to conceive and 50 per cent pregnancy rate.

Mastitis targets were 30 clinical cases per 100 cows, with no culls for high cell count or mastitis problems. Culling costs were put at £648 per extra cull over 6 per cent, the cost of each service put at £20 and the cost of a calving pattern slip beyond 365 days at £3

fits too. That is because there is a need to change the focus on the type of veterinary service that is given to farms, with less emphasis being placed on the price of drugs and more on whether the animals need them in the first place.

"The pressure is on the industry as a whole to reduce the use of certain types of medicines – especially antibiotics. History indicates that if it doesn't get its act together and reduce them voluntarily then the Government will make the decision for it. That is what has happened with pigs and poultry in recent years.

"Reducing the use of such drugs largely starts with an attitudinal change towards the vet and disease in general, with the mindset switching from one that is obsessively fixed on reducing vet costs year after year to one that focuses on disease prevention, and savings.

"Traditionally vets and farmers have been guilty of providing and asking for a service based on the minimum time to achieve a practical task, such as calving a cow or pregnancy diagnosing a group of cattle. In many instances insufficient time and resources are allocated to finding and eliminating the root cause of any problem, in the mistaken belief that quick fix remedies are the cheapest. This is not the case," said Mr Orpin.

"Vet fees are often only a sixth of overall disease costs on a farm. We must move farmers away from throwing treatment at a problem, or in some cases, managing the costs that they accept come with a disease. Instead we must invest in preventive healthcare, which means spending more time working out problems and less time sorting out emergencies. Mastitis is a case in point, where farmers accept high clinical case rates, throw lots of tubes at

the problem and then grumble at the price of the tubes.

"They also manage the indirect costs by feeding waste milk to the calves and pretending it isn't a loss at all. They use minimal treatment regimes, with short withhold periods on the basis that a cure is not so important as getting milk sold again. This is cost management, not disease control and emphasises the difference between investing in health and paying for disease.

"The disease cost calculator allows much more objective discussions about disease prevention strategies to be made helping to either reduce the use of drugs overall or to make the switch from politically sensitive ones like antibiotics to accepted medicines like vaccines.

"It will allow a rational and objective approach to health-care investment, which has previously been made in hope rather than through any calculated risk," he said.

“The disease cost calculator allows much more objective discussions about disease prevention strategies to be made. – Pete Orpin

per day, for example, they said.

"Farmers and vets are always critical of costs that they do not understand, and unless the figures are credible at the outset the economic model will fail at the outset," said Mr Orpin.

"We know our figures are very sound. Just in case a farmer doesn't agree with them though, he can change them to ones he thinks are more applicable to his farm."

Practical testing of the program was carried out on 20 farms in his Leicester practice, with the results revealing a wide variation of economic losses across the farms. In almost every case losses were higher than expected – in some cases up to 4ppl. Savings of around 2.5ppl were realistic in many cases.

"Identifying what can be saved, and where, is obviously the major advantage of the disease cost calculator to farmers. However, there are other bene-

