

# A Blueprint for the Implementation of a Dairy Herd Health Scheme

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## Abstract

Herd health schemes have had a slow uptake by both the dairy farmer and the veterinary surgeon. A few attempts have been made over the last twenty years to increase veterinary and farmer awareness of this approach to preventative medicine, but unfortunately these have had little long term impact. Most of the academic research into the use of herd health schemes has concentrated on the development of computerized recording schemes rather than the logistics of setting up and operating such schemes.

This paper reviews findings of the problems of adoption and diffusion herd health schemes have had in the dairy farming community in the United Kingdom. The aim of the research was to identify the principal problems associated with such schemes, and to develop a strategy for implementing and running a scheme. The process was carried out in two stages, firstly by looking at the veterinary profession's approach and attitudes towards herd health schemes, and secondly, comparing these with the dairy farmer's own approach and attitudes. This paper puts forward eleven main points the veterinarian should address when setting up and operating a herd health scheme.

## Introduction

There is ample evidence that herd health schemes are profitable for both the farmer and the veterinarian. Several trials have been carried out in the UK and abroad and these have shown potential increases to the farmer in margin per cow of between £50 (\$75) and £70 (\$105) (Sol & Renkama 1982, Stephens 1979, Wassell & Esslemont 1993). When looking at it from the veterinarian's point of view, the increase in income is approximately £17 (\$25.5) per cow per year more when compared with the "fire brigade visit only" farms (Wassell 1993). On a typical herd of 150 cows this would benefit the practice by an additional £2,550 (\$3,825) per year. At the same time the farmer would increase his overall margin by between £7,500 (\$11,250) and £10,500 (\$15,750) per year.

In 1989 a postal survey was carried out on 566 veterinary practices in the United Kingdom (Wassell & Esslemont 1992). Out of the 314 (56%) usable questionnaires returned, 98 (31%) practices were running some

form of herd health scheme (ie routine visits combined with some record keeping carried out by the veterinary practice). On the face of it this would seem to indicate that a reasonable proportion of herds are on a herd health scheme. However, looking at the country as a whole, this number is only 588 out of a total of 42,306 registered UK milk producers in 1989 (MMB 1989). This works out at an average of only 6 herds per practice.

The veterinary profession proved to be very positive about the potential of herd health schemes. Over 78% suggests that such schemes would be financially very beneficial to a practice. The survey clearly identified "farmer motivation" as the veterinarians main perception of why many herd health schemes had failed. While "farmer motivation" as a statement on its own is not particularly useful, it was possible to examine this further by asking a sample of 540 farmers about this problem. These were selected as being the clients of six veterinary practices, and were sent a postal questionnaire to seek their views on dairy herd health schemes. This then enabled the identification of the principal characteristics of farmers classified into three groups of herd health users (recording scheme plus routine vet visits), routine visit users (routine visits only) and "fire brigade" (vet called as needed) users.

The main differences between the three groups are: farm size, herd size, seasonality of calving, education, progressiveness, and level of communication. It has proved difficult to differentiate between the herd health scheme users and routine visit farms with these two groups having most of the same attributes. The herd health scheme users are generally 3% to 6% more likely to have seasonal calving herds, higher levels of education, communication and progressiveness than their routine only counterparts. This must immediately point to the fact that farms already on routine visits are likely candidates for full herd health schemes, where herds are monitored through the practice recording scheme (Wassell & Esslemont 1993).

This brought the research to the stage where all the findings could be drawn together, forming a blue-

print for the implementation of a herd health scheme by a veterinary practice.

### **Commitment**

Before a herd health scheme can even be thought about, agreement and support have to be sought from the other members of the practice. Partners have to be persuaded to agree to the capital expenditure required to set the scheme up with the necessary computer hardware and software. All the staff have to be committed to the success of the scheme, even though they may not themselves be directly involved. Lack of communication, or allowing staff to communicate their negative opinions to farmer clients, can quickly counter good work by the herd health scheme protagonists. Watson (1992) additionally notes on this theme:

*"If one member of the practice is not interested in using the herd health scheme then do not try and impose it on their herds. It needs so much personal involvement that it will not succeed without."*

At this point it is worth noting that one veterinarian should have overall responsibility for the implementation and running of the herd health scheme. This creates an overall co-ordinator for the scheme, and all decisions pertaining to the scheme should be channelled initially through this one person. This lessens the risk of problems being overlooked and conflicting decisions being made. Lastly in this section it is worth preparing an inventory of the practice resources needed to make the scheme a success.

- a) Does the practice have sufficient spare lay staff time to operate the scheme, or can part-time workers be found locally?
- b) Do the cattle veterinarians have the time to commit to herd health schemes; it is difficult for one veterinarian to handle more than 25 - 30 farms on herd health schemes?
- c) Do the practice premises have space for the computer, printer and filing cabinets needed?
- d) Does the area selected for the computer have a telephone close by, since it creates a difficult situation if messages have to be relayed to the computer operator?

### **Self-Appraisal**

Once the decision has been made to set up a herd

health scheme, it is useful to do a self-appraisal of the herd health skills that the practice can offer. Since a herd health scheme will encompass more than just strictly veterinary work, it is worth reviewing the level of knowledge in dairy herd management, farm management, nutrition, buildings, and so on. This does not mean that the practice should drop the idea of a herd health scheme if it does not possess these skills, rather that this allows it to know its current limitations, thus avoiding situations where erroneous information may be handed out resulting in further problems.

With these restraints in mind, the veterinarian will know when to refer a problem or seek expert advice. It is useful to be acquainted with the local feed, Ministry and private advisors, and additionally it is worth getting to know other veterinarians who are running herd health schemes as they will form an invaluable source of advice.

### **Market Research**

With the results of the research it is now possible to identify the dairy farmers who are potential herd health scheme users (Wassell & Esslemont 1992). The practice's dairy farmer clients should be classified according to their herd size, seasonality of calving, whether currently using routine visits, etc as shown in figure 1.

### **The Identification of Key Farms**

With this list it is then possible to target the most likely candidates by using customer profiles and developing target segments. While it is worthwhile mentioning the new herd health scheme or leaving a leaflet at all the client farms, the main effort must be concentrated on the selected group. This will give a preliminary idea as to the likely and immediate level of interest.

When starting up a herd health scheme, only two or three farmers should be approached to be put on the scheme at the start, selected from high on the list of probability. From these, at least one should be found willing to give the herd health scheme a try. By concentrating on one or two farms only it allows the learning process to take place without too much pressure. Consultation with the participating farmer can occur frequently, to check that he is getting the reports and service he expects. This allows for the fine tuning of the scheme before larger numbers of farmer clients are approached.

When selecting these start-up farmers, it is important to consider their standing in the local farming community. Innovator and early adopter farmers could sometimes be classed as cranks, gadget orientated or in a different league to the rest of the community. If this

**Figure 1**



Innovative Farms - Can they be related to by other farms ?

type of person is inadvertently chosen it could actually slow down the take-up of the scheme. If the farmers selected are recognized as good, competent farmers by the rest of the community this can greatly enhance the uptake, especially if they are good communicators and regularly attend meetings and discussion groups.

### Ferdinand Used

The Ferdinand method (Wassell & Chamberlain 1994) can be used at two points in the adoption stage to assess the farm's losses and target problem areas. Firstly, it can be used to actually persuade the farmer to join a herd health scheme by pointing to the farm's problems in simple, understandable financial and physical terms. Secondly, it acts as a starting point for one of the fundamental parts of a herd health scheme, namely the setting of goals and targets for the herd health scheme to work on.

### Collecting Back Data From the Farm

Once the farmer has agreed to join the herd health scheme, the backdata needs to be collected from the farm. This can be a critical time in the take-up process, as the collection of this data is frequently forgotten about or constantly put back. If this is causing a problem on particular farms, it is worthwhile arranging a visit specifically to collect the data and discuss what each party

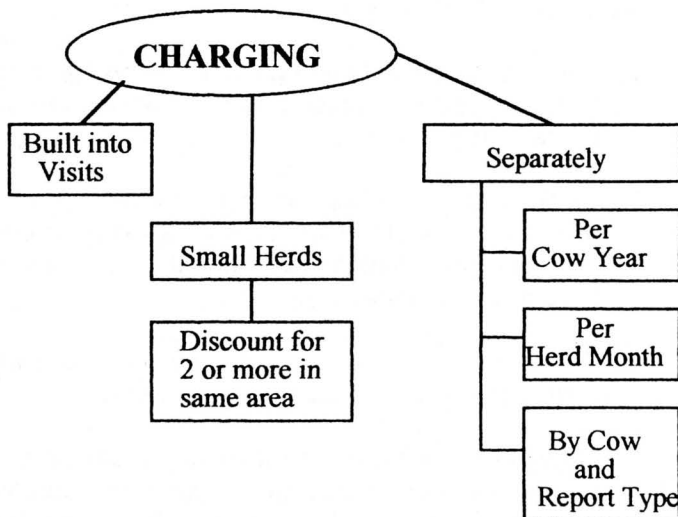
is expected to do to make the herd health scheme work. This can also be a useful opportunity to inspect the farm's cattle handling facilities and suggest any improvements or alterations that need to be made.

### Charging For the Service

There are currently as many methods for charging for the recording element of herd health schemes as there are schemes in existence. This ranges from complex methods relating to the number of cows in the herd per month, combined with the number and frequency of reports, and possibly linked together by what is actually recorded, whether just fertility and health or additional milk yields, milk quality, somatic cell counts etc. At the other extreme some practices will make no separate charge for this service, instead covering the costs through the routine visits.

Possibly the most suitable compromise is a small charge to cover the direct costs of running the scheme in terms of capital depreciation, costs of consumables, support charges, wages of computer staff and so on, with the profit component coming from the routine visit itself and the extra work carried out as a result of the visits (Wassell 1989). This charge can be in terms of a cost per cow (eg £1 to £1.50 (\$1.50 to \$2.25) per cow per year, 1994 values) or a charge per herd per month (eg £10 to £15 (\$15 to \$22.50) per herd per month, 1994 values); for larger herds this may need to be increased (eg £20 to £30 (\$30 to \$45) per herd per month, 1994 values).

**Figure 2**



### Methods of Charging For a Herd Health Scheme

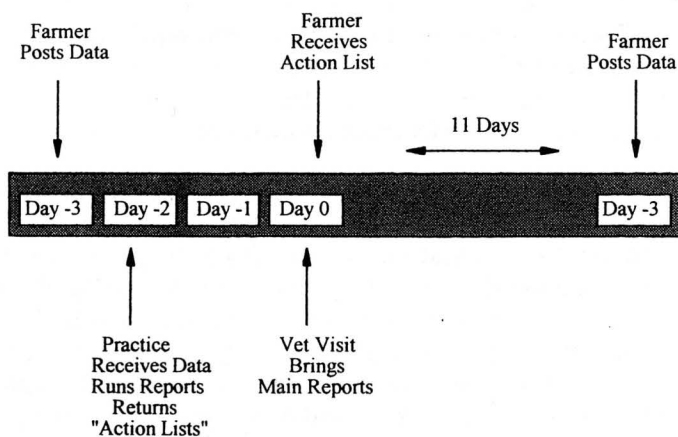
Charges for the routine visits themselves can either be left at the normal rates for the practice, or

discounts offered for a fixed term commitment to the scheme. Small farms may need special arrangements since they will generally have only a few cows to see at any one time, and this can be done by arranging the visits of several small farms in one area to coincide on the same day.

### Getting Data and Information To and From the Farm

A key feature of the successful herd health scheme is the timeliness of reports being processed and sent to the farm. Action lists need to be back on the farm as quickly as possible; raw data arriving from the farms would be processed and the reports dispatched the same day. Nothing will destroy a herd health scheme faster than data lying around unprocessed at the practice whilst the farmer is wanting to know what to do next.

**Figure 3**



#### Postal Service - Fortnightly Visits

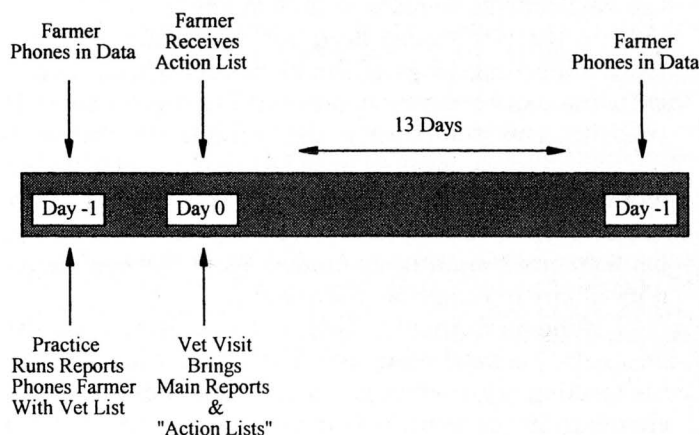
There are several ways of getting data from, and information back to the farm, all with their own benefits and drawbacks. The most common method used is the postal service with the farmer sending in his data sheets 3 or 4 days before the routine visit is due to take place (figure 3). This is then processed and the action lists (in particular the action list for cows to be seen at the next visit by the veterinarian) are posted back to the farm. The veterinarian will bring the more detailed reports with him at the time of the visit.

Whilst the above is how many schemes work, there are several variations which can help speed up the movement of data and information between the farm and veterinary practice. In some cases it is possible to get the farmer or his wife to drop the data off at the practice when he or she is in the town, and possibly even collect the processed information on the return journey. The veterinary staff can pick up and drop off informa-

tion if they go past any of the herd health scheme farms on a regular basis.

In addition, more use could be made of the telephone for speeding up data processing (figure 4). The farmer and the computer operator can have a pre-arranged telephone time when both parties are available and the farmer has the data up to date. This can then be passed over the phone, processed, and if necessary phoned back within the hour, particularly if cows are needing to be selected for the routine visit.

**Figure 4**



#### Phone Service - Fortnightly Visits

Lastly, the growing number of Fax machines appearing (particularly on larger farms), can also form an ideal way to get data and information to and from the farm. Looking to the future, data will probably be transmitted electronically to and from the farm, with the possibility of data being processed via a computer operator working from home.

#### Veterinarian's Involvement With the Reports

Since the veterinarian's involvement with the farm is vital to the success of the herd health scheme, it is important that the veterinarian responsible for the farm in question reviews the main reports prior to taking them to the farm. These can be gone through with highlighting pens to point out areas of concern, be it a cow that has still not conceived or an alarming change in the number of cases of mastitis recorded. Notes should also be written down next to the problem if necessary. On arrival, these can then be discussed with the farmer and a course of action formulated.

#### Practice Meetings

It is worthwhile arranging a farmer meeting approximately 3 to 6 months after setting up the new herd

health scheme. This can be done as one meeting or several smaller meetings. Since the more likely clients for the herd health scheme have been identified and classified, it may be beneficial to mix the classifications of farmers if several meetings are proposed.

In any event it is most important to have the farmer or farmers who are already on the herd health scheme in the audience. They will act as consultants for the farmer angled questions, be able to point out the benefits they are getting out of the scheme, and what they hope to get out of it. This will allay some farmers' fears that a herd health scheme is just another method for the veterinarian to make money out of them.

In the established herd health scheme, yearly or twice yearly meetings of the herd health scheme participants can be highly beneficial. The veterinarian in this situation should act as the facilitator of the meeting, allowing the farmers to decide the level of intimacy as regards farm performance being disclosed. In a progressive group this should not be a problem, although participants should be reminded about the confidentiality of any information discussed.

If the participants agree, these meetings can also be a valuable marketing tool. The veterinarian can use the meeting to introduce prospective herd health scheme clients to the concept. It is important however to limit these persons to no more than one or two, since the meeting is principally for the discussion of health and fertility performance, and not for debating the pros and cons of being on a herd health scheme.

### End of Year Reports

End of year reports are an important part of the successful herd health scheme. These reports summarize the year's work and allow the setting of targets for the next year. These targets are important if the herd health scheme is to succeed as they provide evidence to show the farmer the extent of the progress. Targets may be changed from year to year once a problem area has been brought under control, but there is little point in pursuing targets beyond any economic benefit that might occur. This however does not mean that the monitoring of that aspect should stop.

### End of Year Reporting

The report should be taken personally to the client, thus allowing the performance during the year to be discussed in detail and next year's targets set. In addition to looking at areas where progress was made, it is also important to consider areas where it was not and in particular to consider why not. This should cover most aspects of the herd's management so that a com-

Figure 5



plete understanding of that particular herd's problems can be gained.

### Financial Analysis

Financial analysis can make a useful contribution to end of year reports since it allows all the physical indices, targets and goals to be drawn together under one common denominator, readily understandable by both the veterinarian and farmer. Caution must be used when applying monetary values to changes in the herd's performance, since some of the factors that have brought about the gains (or loss) could be due to reasons outside the area of the herd health scheme's influence. This makes it important to understand how the index is calculated, the factors that can affect it and to what extent. This knowledge is also useful to identify indices that could double account if calculated together.

### Discussion

As farmers who remain in milk production and their herdsmen become better trained in husbandry skills, they will become less dependent on the veterinarian for this type of work. Additionally, the very technology discussed in this paper, in addition to the many other advances being made such as scanners and milk assays, will displace some of the veterinarian's traditional skills. However, these changes should be looked on as a stimulus for the development of the veterinarian's role on the farm, replacing his current and primarily technician's role with that of the health, fertility, and welfare advisor/consultant. This can only be brought about by the careful implementation and

management of the herd health scheme.

Veterinary practices that currently obtain a significant proportion of their income from the treatment of dairy cattle, will have to take on board the concept of preventive medicine in the form of herd health schemes if they choose to retain the dairy farms amongst their practice clients. This paper points to the need for veterinarians to address herd health schemes as the whole concept of supplying management information and advice, rather than just the purchasing of a computer and necessary software. The benefits in extra fees and drug sales to a practice that has 20 or more dairy farms on its herd health scheme can be in excess of £51,000 (\$76,500); this makes a herd health scheme an attractive addition to the practice. An extra benefit in controlling farm records from the practice, is that it tends to lock the farmers into the scheme, (and thus the practice), particularly where ministry information is involved. Lastly, the veterinarian will generally get more satisfaction from the increased participation in the decision making and management of the herd.

**The points raised in this paper cannot be considered to be an exhaustive plan on how to set up and run a herd health scheme, but aim to point out particular problem areas that need to be ad-**

**dressed when setting up and running a scheme.**

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## Abstract

### **Expanding the role of consultants - Team approach taps skills and knowledge**

*Drovers Journal, May, 1995.*

Consultants possess untapped knowledge and skills that could apply to numerous aspects of the feedlot operation, according to Dr. Louis Perino, Great Plains Veterinary Education Center at the USDA Meat Animal Research Center, Clay Center, Nebraska. He believes management should involve consultants in planning and setting goals for the operation. Through that process, they can identify opportunities for participation by the consultant outside the usual specialized role. Dr. Perino stated that many feedyards maintain good records but could draw on their consultants' skills to put them to the best use. A research-oriented consultant can help design a data-collection system that will facilitate analysis, boosting the value of the feedyard's records as a decision-making tool.

Dr. Perino feels that consultants can help assure quality at all levels in the feedyard. The best opportunities to improve feedlot operations involve personnel development. He maintains that managers and consultants should ask themselves whether feedlot personnel

are physically and mentally prepared to perform the tasks ahead. He added, "I continue to see plenty of opportunities for veterinarians to train feedlot crews in processing techniques, sanitation, mixing vaccines etc.

Animal behavior serves as another example where the veterinarians training can contribute to safety and a less stressful environment for cattle. Dr. Perino reminds veterinarians and producers that 'cow sense' is not genetic. It has to be learned, either by design or by trial and error.

Dr. Perino views feedlot environmental issues as an emerging need for involvement from consultants. First, related to the feedlot environment and its effects on cattle, including issues such as pen density, mound placement, bunk space and drainage.

Dr. Perino stresses opportunities to improve traditional services also; such as disease prevention. He stated that consultants can play a significant role in going to the sources of feeder cattle and intervening with preventative measures before they ship to the feedlot.