

Overcoming Barriers to Lameness Control on Dairy Farms

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■ Take Home Messages

- Controlling lameness in dairy cattle is a major challenge.
- Working with farms to help them plan and implement their own plans has considerable merit. Farmers know their own farm and their own situation best and are therefore “experts” in what lameness control measures are possible for them.
- Using this expertise can lead to the generation of many lameness control ideas and is likely to result in better implementation.

■ Background

Promoting a reduction in the levels of lameness in UK is an important priority for the UK dairy industry. Whilst further studies are still needed to better understand some aspects of cattle lameness, a significant body of knowledge is already available that could and should be implemented at a farm level. Previous work has developed a risk assessment approach that promoted the development of farm specific action plans based on farm specific risk factors (Bell et al., 2009). However, an important finding from this work was that even though the advice on how to reduce lameness was valid, many farmers did not implement it when it was provided in a traditional advisory style. Better methods for promoting uptake of existing knowledge are, therefore, needed to promote reductions in lameness.

■ Intervention Study Outline

The need to encourage farmer uptake of lameness-related advice led to a relatively large scale intervention project; the Healthy Feet Project. The project was supported by Tubney Charitable Trust and the initial partners were Milk Link, Long Clawson, OMSCO, Freedom Food and Soil Association Certification. The project also went on to work with an even greater number

of industry stakeholders to insure wider application of the findings from the project. The project team developed a range of tools to promote on-farm implementation of lameness prevention activities using the principles outlined below. For each principle the project team developed specific methodologies applicable to UK dairy farms. An intervention study involving 140 intervention and 87 control farms was then initiated to examine the effect of this approach. Dairy farms were recruited via direct contact or via the relevant milk companies. A team of four researchers with a good understanding of lameness then undertook a four year programme of visits, follow up telephone contact and group meetings on those farms receiving the intervention. The effect of these interventions on husbandry changes and lameness will be available at the end of the four-year study period.

■ Intervention Approaches

The key primary focus for the project was to promote the uptake of actions / activities likely to reduce lameness or to refine existing lameness reducing activities to increase their effectiveness. These actions were based on existing knowledge of risk factors known to influence lameness and on advocating the early treatment of lame cows. Although mobility scoring and formal risk analysis are valuable tools for promoting lameness improvement, it was considered critical that these management tools did not become the primary focus of the initiative. It is clear that when management tools are introduced without consideration of the target audience some resistance is inevitable. This has been seen with health planning initiatives which have been variably received by UK farmers (Bell et al., 2006). So the project did not concentrate on insisting that farmers agree with the results of a lameness assessment which was considered confrontational. It was thought more important to provide an identification list of cows that were likely to benefit from treatment rather than present an overall prevalence figure. Similarly for the risk assessment process, even though formal evaluation tools were available, the dialogue with producers did not concentrate on explaining risk assessment process or detailed finding on farms. The risk assessment web site (www.cattle-lameness.org.uk) was, therefore, only advocated for use by those farmers and their vets/advisors with a particular interest.

Since the primary focus was on promoting an uptake of lameness relevant activities, the project team developed a social marketing approach suitable for UK dairy farmers. Social marketing (McKenzie-Mohr and Smith, 1999) involves the application of marketing principles to an area of social benefit, in this case animal welfare. Farmers in the UK often work alone on their farms, they have very limited contact with others and their days involve completing a lot of repetitive, routine tasks. So social marketing for farmers needed to include more contact with individuals than would normally be expected; this contact was delivered through the four researchers visiting each farm at least once a year.

The key elements of the social marketing “type” approach used in the project are outlined below:

Recognizing the Benefits and Barriers to Change

Farmers are more likely to take action if they perceive **benefits**, although, this change may be limited by any perceived **barriers**. For every desired change in behaviour there will be both perceived benefits and perceived barriers. A potential benefit may include believing that the change will save time, offer economic benefit, or perhaps contribute to making other tasks on the farm easier. For example, keeping the feet of cows clean in order to reduce infectious lameness may also result in cleaner udders and faster milking times. A potential barrier to achieving cleaner feet might include a lack of appropriate equipment, for example the yard scraper may be inefficient and need repair, modification or replacement or a perceived lack of time to increase the frequency or diligence of yard scraping.

It was important that the project team who were promoting behaviour changes understood the details of the possible benefits and barriers as perceived by the farmers. It was also essential that the project team members encouraged implementation of changes on farm by using phrases and quotes that made sense to the farmers they were speaking to. This was achieved by inviting farmers to a series of focus groups where their ideas and the language they used was listened to very carefully.

Facilitating Farmers to Plan Their Own Changes

Farmers are more likely to implement management or routine that result from their own ideas i.e. a “farmer-owned approach”. A good facilitator will not provide unsolicited advice, i.e. **they will not tell the farmer what to do**. The goal should be helping the farmer to generate solutions that are appropriate to his or her own farm. Members of the project acted as facilitators and walked around the farm with the farmer asking questions about particular aspects of the farm which were likely to be risk factors for lameness. During this walk round the farm the facilitator addressed barriers to change presented by the farmer by encouraging him or her to weigh them against potential benefits. The facilitator also shared the experiences of other farmers by describing actions they had taken, and offered contact details of other farmers (with their permission) that had found ways of tackling a similar problem. At the end of the facilitated visit, before leaving the farm, the facilitator compiled a summary of the changes the farmer had identified as being possible to make into an action list including notes on who would be responsible for implementing each change (the farm manager, herdsman, tractor driver etc) and when the change was going to be implemented along with a space to tick when the change had been introduced. This list was then left with the farmer for the coming year.

Establishing Lameness Prevention Activities as a Normal Behaviour or “Norm”

Farmers are more likely to change behaviour if they know others have done the same. Establishing “norms” is the process for reassuring farmers that others are also making changes i.e. that it is normal behaviour to make changes to reduce lameness. The project brand “Healthy Feet Project” and its use in all communications ensured that all the participants are aware they belong to a larger project in which others are involved and that they had a group identity they could be proud of. Norms were also created through describing what changes other farmers had made on their farms. This helped to address perceived barriers but also acted to reassure each farmer that others were also making changes and overcoming problems. The activities of other farmers were relayed using verbal descriptions, photographs of what they had changed (with their permission) and a regular newsletter which featured case examples of farms where changes had been implemented.

Encouraging Commitment to the Project

Commitment is the key for sustaining behaviour change. There are various techniques to encourage more positive commitment. Within the lameness project all participating farmers were given a jacket lapel badge and a car sticker of the project logo and they were encouraged to display them. Although this is a relatively small act, by showing others that they were part of the project they were more likely to go on to implement the more challenging changes. Further areas where commitment was promoted were through asking farmers to put their signature on the action plan which is drawn up during the facilitation visit and through asking their permission to show others photographs of their farms (with their names clearly identified on them)

Providing Prompts as Reminders to Implement New Activities

Prompts act to remind people of agreed activities and help sustain the new behaviour. Although peoples’ intentions to change a particular practice or habit are generally good, new activities can easily be forgotten or slip from mind, especially when they involve making changes to existing routines or when people find themselves under time pressure. Within the project a catalogue of suppliers of equipment, services and materials that were commonly needed when making lameness reducing changes, was presented to the farmer at the time when the facilitated action list was generated. The catalogue was intended to prompt picking up the telephone and placing an order or booking a service etc. A common stalling point for action was farmers saying they didn’t know where to buy a material, for example wood shavings to spread on cows beds to increase their lying comfort. The catalogue overcame this.

■ Future Application

The approaches advocated in this project have been validated for other disciplines as reviewed by Whay and Main (2009). Therefore it seems reasonable to advocate their application to the UK farming environment. However, as with all new ways of working the devil will be in the detail and it is hoped that such management tools will be further developed and refined in the future. In particular it is hoped that advisors working with farmers reflect upon their methods of working. A farmer-owned approach is not only much more likely to be effective but recognises that farmers hold skills and knowledge about farming that most veterinary surgeons and advisors will never be able to duplicate.

■ References

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