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Use of visual and permanent identification for pets by veterinary clinics

P.A. Dingman, J.K. Levy *, L.E. Rockey, M.M. Crandall

Maddie's Shelter Medicine Program, College of Veterinary Medicine, University of Florida, Gainesville, FL 32610, USA

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ABSTRACT

It is estimated that more than 5 million stray dogs and cats enter animal shelters in the USA each year, but less than half are ever reunited with their owners. Lost pets with identification microchips are up to 21 times more likely to be reunited than those without. Finders of lost pets are more likely to consult veterinarians than shelters for assistance, and pet owners look first to veterinarians for advice regarding pet health, protection, and welfare. An online survey of 1086 veterinary clinics in the South-Eastern USA was conducted to evaluate how veterinary clinics functioned as a part of the pet identification network. Scanning and microchip implants were offered by 91% of surveyed clinics and 41% used 'global' scanners capable of detecting all currently used microchip brands. Clinics more frequently relied on pet owners to register contact information rather than providing this service for clients (52% vs. 43%, respectively). Even though lost dogs are more likely to be reunited with owners than lost cats, microchips and collars were more likely to be recommended for all dogs (85% and 93%, respectively) than for all cats (67% and 61%, respectively). Only half of clinics that recommended identification collars made them available to their clients. Veterinarians can protect animals, pet owners and the human–animal bond by integrating pet identification into preventive health care.

Introduction

It is estimated that more than 2 million dogs and 2.6 million cats are lost from their homes in the USA each year (Weiss et al., 2012), representing 14% of owned dogs and 15% of owned cats during any given 5 year period. In a recent national study in the USA, pet owners were more likely to have identification on their lost dogs (89%) and to visit an animal shelter to look for them (75%) than to have identification on their lost cats (60%) or to visit a shelter to look for them (22%; Weiss et al., 2012). Overall, owners of lost pets recovered 93% of dogs but only 75% of cats. Reunification rates are lower for the 5–7 million unidentified cats and dogs that enter animal shelters each year.

Pet owners can reduce the risk of permanently losing their pets by using both visual identification and permanent microchipping. Visual identification in the form of a collar and identification tag provides the most efficient method of reunification, since any finder can read the tag and contact the pet owner immediately. Lord et al. (2007a, b and c) demonstrated that lost pets with visual identification were more likely to be reunited with their owners. In another study, usage of collars with personalized identification tags increased from 14% to 84% over an 8 week period when veterinary clinics placed free collars and tags on pets during an office visit (Weiss et al., 2011).

Permanent identification in the form of an implanted microchip offers the benefit that it cannot be removed, altered or lost. In a large national study in the USA, microchipping increased owner recovery of pets at shelters from 22% to 52% of dogs and from 2% to 39% of cats (Lord et al., 2009). In a study of search methods used for finders of lost pets, finders were almost twice as likely to take a found pet to a veterinary clinic for microchip scanning as they were to take the pet to an animal shelter (Lord et al., 2007c).

Three key elements are required for the microchip identification network to function properly. Firstly, a microchip must be implanted in the animal. Then, if the pet is lost, it must be scanned with a device that is capable of detecting and displaying the microchip's unique identification number. Finally, owner contact information must be up to date and available in a readily accessible database. In much of the world, regulations exist to: (1) standardize the industry such that all microchips and scanners are compatible with one another, and (2) mandate that a centralized database be used to compile all pet owner information.[1] The UK, Western Europe, Australia, New Zealand and Canada all use microchips with a single frequency (134.2 kHz) recommended by the International

* Corresponding author. Tel.: +1 352 273 8722.
E-mail address: levyjk@ufl.edu (J.K. Levy).

[1] https://www.avma.org/KB/Resources/Reference/Pages/Microchipping-of-Animals-Backgrounder.aspx.

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Standards Organization (ISO). Coupled with scanning devices that read the ISO frequency, this ensures that all microchips are detectable in participating countries and that there is a globally aligned pet identification system.

Several factors have impeded the development of a comprehensive pet identification safety net in the USA. The procedure for implantation of the microchip is separated from the procedure for registration of owner contact information, resulting in a large proportion of microchips that lack current owner information in the microchip manufacturers' databases. In the absence of a universal and centralized database to collect owner contact information, pet owners and pet finders could miss vital information if the wrong database is contacted. In addition, the USA lacks any regulation regarding the type of microchips that can be sold to pet owners. There are currently three different microchip frequencies sold in the USA: 125 kHz, 128 kHz and 132.4 kHz. Additionally, a large proportion of the scanning devices currently in use and still being sold do not detect all types of microchips (Lord et al., 2008a and b). Missed opportunities to detect implanted microchips have resulted in failure to reunite lost pets with their owners, mistaken euthanasia and legal action against veterinary practices and animal shelters.

The American Veterinary Medical Association (AVMA), the American Animal Hospital Association and the American Association of Feline Practitioners have joined international veterinary associations in calling for widespread use of microchips for pet identification. In addition, these organizations are unanimous in their call for universal adoption of the ISO 134.2 kHz microchip, scanning devices capable of detecting all types of microchips and centralized database access of pet owner information. Taken together, these measures would improve the pet identification safety net.

Veterinarians have an opportunity to play a key role in educating pet owners to use effective forms of pet identification. Veterinary clinics are convenient and trusted venues for obtaining both visible and permanent identification. It is the position of the AVMA that 'implantation of microchips is a veterinary procedure that should be performed by a licensed veterinarian or under supervision of a licensed veterinarian'.[2] This policy is a call to action for veterinarians to become involved in protecting pets and a restriction of this service to licensed veterinarians as providers. The aim of the present study was to evaluate the role veterinary clinics currently play in the implementation of a functional pet identification and reunification network in south eastern USA.

Materials and methods

Sample population

In the USA, veterinary clinics are independent agencies and no directories systematically and centrally catalog all of them. We created a directory of veterinarians and veterinary clinics serving cats and/or dogs in the states of Florida, Alabama, Georgia and Mississippi by compiling listings available from state licensing boards, regional veterinary medical associations and websites. We attempted to contact each clinic by e-mail or telephone to verify accurate directory listing and to identify contact personnel.

Survey instrument

A prototype survey was administered to a focus group of 10 veterinarians to assess clarity and ease of use. Their feedback was used to create a final survey version. The survey in final format was administered through an internet-based survey response tool (Survey Monkey[3]). The survey was not anonymous; contact information was requested to facilitate any necessary clarification of responses. The survey had 22 questions regarding clinic location, services provided, use or non-use of microchips, reasons for non-use, microchip brand(s), number of microchips implanted in the previous year, selection of pets for microchip implantation, scanning procedures and procedures for enrolling owner contact information in a national database (see Appendix S1 in the online version at doi:10.1016/j.tvjl.2014.04.024). Clinics also were asked about their recommendations for the use of pet identification collars, along with the availability of collars at the surveyed clinics.

Survey administration

Surveyed clinics were initially contacted by postcard and encouraged to complete the survey by accessing a web link. An invitation for study participants was also provided using the e-mail list serve of the Florida Veterinary Medical Association. Study staff assisted with the collection of survey results from respondents without internet access and from those indicating a preference for completing the survey by telephone or written communication. For these respondents, study staff entered results using the internet survey tool. Simultaneous with postcard delivery, electronic announcements were transmitted to clinics for which e-mail addresses were available. Delayed respondents were canvassed by telephone at 30, 90 and 180 day intervals thereafter, and by monthly email reminders during the 6 month survey period. This procedure was supplemented by a second postcard mailing at 30 days, followed by mailing a hard copy of the survey with a stamped return envelope at 90 days.

Data collection and analysis

Survey responses were audited for completeness and internal consistency as they were submitted. Descriptive statistics were compiled for categorical data. Statistical comparisons were made using χ^2 tests, with $P < 0.05$ considered to be statistically significant.

Results

Survey response

Surveys were sent to a total of 3132 veterinary clinics (1664 in Florida, 694 in Georgia, 529 in Alabama and 245 in Mississippi). Completed surveys were received from 1086 veterinary clinics (35%).

Scanning and microchipping practices

Of 1086 respondents, 992 (91%) scanned at least some animals for microchips (Table 1). Of these 992 practices, 381 (38%) did not have global scanners capable of detecting all currently used microchips. Scanning was client driven, with the majority of clinics scanning stray dogs and cats, scanning at the time of microchip implantation or scanning upon client request. Clinics that did not offer microchip implantation ($n = 93$) indicated no perceived need (58%) or a belief that the microchip identification system did not work well (39%; Table 2).

Table 1
South-Eastern USA veterinary clinics that scan for microchip identification, type of scanning devices used, and timing of scanning.

Scan information	*n* (%)
Microchip scanning policy	1086
Clinic scans for microchips	992 (91)
Clinic does not scan for microchips	94 (9)
Type of scanners used[a]	992
Global (125, 128, 134.2 kHz)	409 (41)
Non-global (125 kHz)	381 (38)
Both global and non-global	198 (20)
Unsure	4 (0.4)
When cats and dogs are scanned[a]	992
When stray brought in	949 (96)
At the time of microchip implantation	941 (95)
Upon client request	866 (87)
When newly acquired pet brought in	611 (62)
Annual examination	175 (18)
At every visit	44 (4)
Upon rescue group/shelter request	9 (1)

[a] More than one answer could be chosen, so responses total > 100%.

[2] https://www.avma.org/KB/Policies/Pages/Electronic-Identification-of-Companion-Animals-Birds-and-Equids.aspx?PF=1.

[3] https://www.surveymonkey.com/.