Compliance: Taking Quality Care to the Next Level  
Executive Summary

In 2008, the American Animal Hospital Association, supported by Pfizer Animal Health, conducted a national research project, combining surveys and interviews, to quantify practice team improvement of pet care compliance and examine pet owner adherence to recommendations and direction for dispensed or prescribed medications. This Executive Summary explains why the study was undertaken and summarizes key findings.

The full report, along with a companion publication, Six Steps to Higher Quality Patient Care (forthcoming), explains the methods and findings in depth and suggests ways that practices can incorporate effective strategies for involving every member of a pet’s health-care team—including owners—to ensure that health care recommendations are made and followed. Only when both issues—compliance and adherence—are addressed can pets be assured of the highest quality health care.

Definitions

For purposes of this study, compliance and adherence are defined as follows.

Compliance
The extent to which pets receive a treatment, screening or procedure in accordance with accepted veterinary health care practices. Compliance involves both veterinary staff performing and/or recommending treatments, screenings and procedures and pet owner follow-through.

Adherence
The extent to which patients take medications prescribed, involving the pet owner in filling and refilling the prescription; administering the correct dose, timing and use; and completing the prescribed course. Adherence is a term applied specifically to medications; it does not refer, for example, to recommendations for wellness checks, diagnostic screenings and so on.

Background

In 2002, AAHA, supported by Hill’s Pet Nutrition, Inc., conducted the profession’s first landmark study on compliance. The study report, *The Path to High Quality Care*, was published in 2003. As its key finding, the study revealed that most veterinarians believed a high percentage of clients complied with the recommendations they received for good pet care, but, in fact, a substantial number of patients were not actually in compliance.

Following publication of the study, compliance became a focus for much of the profession. However, questions still remained about the measure, level and sustainability of the improvements. Thus, in 2008 AAHA initiated the present study to look deeper into the issue of compliance, investigating whether practice teams had taken measures to improve compliance and the effects of such efforts.

The Current Study

The current study is divided into three modules:

1. Benchmarking against medication adherence in human medicine to identify strategies for improving adherence.
2. Research related to pet owner attitudes and actions regarding adherence to identify barriers and veterinary behaviors that affect adherence.
3. Investigation and analysis of compliance improvement initiatives in veterinary practices that had attended a compliance workshop or had taken steps to improve compliance.

Module 1: Benchmarking Against Human Medicine

This module involved an extensive review of medical literature dealing with medicine adherence, as well as in-depth interviews with 14 experts in the field, including physicians, pharmacists, consultants and industry representatives. Many of the studies in the literature included sophisticated monitoring systems, rather than simply relying on patient self-reporting. The studies covered a wide range of conditions and, while there is a broad range of adherence rates, few studies found rates greater than 80% and many were much lower. The study also showed a clear benefit in improved outcomes and lower costs in those patients who have higher adherence.

The following were identified as barriers to medication adherence in human medicine. *The current study assumes that similar barriers exist for veterinary care:*

- Psychological factors, including side-effects concerns, denial about need, forgetfulness and lack of obvious or acute symptoms for conditions such as high blood pressure
- Lack of understanding or belief in the importance of the medication
- Length of therapy, complication of regimen and cost
- Ineffective or incomplete communication between patient and physician

Who Is Responsible for Compliance? A Major Shift in Perception

In 2002, 60% of veterinary professionals interviewed indicated that compliance was the client's responsibility.

In 2008, 60% of those interviewed stated that compliance is the practice team’s responsibility.
A range of interventions have been shown to work in human medicine and are applicable for veterinary medicine. Generally, the interventions fall into three categories:

- **Technical**: Simplify the regimen.
- **Behavioral**: Offering praise or following medication with play or food. Provide refill reminders by mail, phone or e-mail.
- **Educational**: Provide printed or pictorial instructions and patient counseling by a physician or pharmacist.

Some of these are quite straightforward and easily accomplished; others may involve carefully planned effort on the part of the practice team.

**Module 2: Research Related to Pet Owner Adherence**

This module consisted of in-depth interviews and an online survey of pet owners, who were diverse in geographic location, age and experience as pet owners. The online survey targeted pet owners given a prescription in the past six months (acute conditions) or 12 months (chronic conditions). Prescriptions for heartworm preventives were *not* included in the study.

One of the most important findings here is that there are significant gaps between those communication elements that would improve adherence (according to pet owners) and those that are actually delivered by veterinary practice teams. The six most important communication practices are *demonstration, length of appointment, written information, follow-up calls, chronic medication reminders* and *continuity with the veterinarian*.

In exploring medication cost as a possible barrier to medication adherence, the researchers found that pet owners are willing to pay a premium for ease of administration.

Clearly, by improving communication practices, veterinary teams can expect improvements in patient adherence. In addition, veterinary practice teams may feel confident in recommending or prescribing medications that are easy for pet owners to administer, even if ease-of-use comes at a price.

**Module 3: Investigation and Analysis of Compliance Improvement**

This module provides an in-depth analysis of compliance improvement efforts made by veterinary practices since the 2003 study. The research consisted of in-depth interviews and an online survey. The goals here were to determine best practices for compliance improvement, the cost of various compliance initiatives, and the return on investment.

Data was collected on recommendations and compliance for core vaccines, heartworm preventive and testing, dental disease grading and dental treatment, pre-anesthesia profiles, senior screenings, and chronic medication and associated diagnostic testing. Note that core vaccines, heartworm, dental prophylaxis, pre-anesthetic testing and senior screenings were covered in the 2003 study as well, providing some ground for comparison of results.

All areas, except vaccines, show significant improvement in compliance over the 2003 levels. Overall compliance for all parameters measured increased from 64% to 73%.
What promotes compliance?
In addition to rates of compliance, this study module sought to identify the behaviors and actions that lead to compliance. To begin, the study referred to the CRAFT formula, created following the 2003 study to easily identify key steps that encourage compliance. The CRAFT formula is:

\[ \text{Compliance} = \text{Recommendation} + \text{Acceptance} + \text{Follow Through} \]

The current study confirms that the CRAFT formula is the foundation for any compliance program; most practices investigated perform these basic steps in some form. Note that the formula does not spell out specific actions for each step in the CRAFT process. The current study sought to discover what specific actions might succeed in boosting compliance and adherence. Researchers found that practices with highly effective compliance programs invest in compliance improvement, attend compliance workshops, train staff, educate clients and monitor regularly.

When veterinary practices employ four or more of these actions, they achieved higher compliance than practices that do not. Moreover, the frequency with which each action is performed or repeated positively correlates to greater compliance.

Conclusion

Since 2002, the veterinary profession has seen a groundswell of awareness in terms of compliance, particularly as a driver of quality care and economic benefit. Practices now accept greater responsibility for compliance and understand that the actions of practice team members can significantly affect pet owner behaviors.

Compliance and adherence efforts succeed best when all operational areas of the practice become involved in the effort, for example, as owners invest in staff training, medical directors create protocols, technicians educate and persuade clients, and administrative staff schedule follow-up appointments and place reminder calls at opportune moments.

Best results are achieved when every member of the pet’s health care team—from practice owner to pet owner—pulls together to provide the best health care for the pet.