1. . "The more power people have the more they condemn the unethical behavior of theirs. . . . At the same time, it was shown that the more power people have the less they disapprove of their own unethical behavior" (52) [Lammers J, Stapel DA, Galinsky AD (2010). Power increases hypocrisy: moralizing in reasoning, immorality in behavior. *Psychological Science*, 21, 737-744; Lammers J, Stapel D (2009), How power influences moral thinking. *Journal of Personality and Social Psychology*, 97, 279-289; de Cremer D, van Dijk E, Reinder Folmer CP (2009). Why leaders feel entitled to take more: feelings of entitlement as a moral rationalization strategy. In de Cremer D (Ed). *Psychological Perspectives on Ethical Behavior and Decision Making.* Charlotte, NC: Information Age Publishing, pp. 107-119].
2. Beeping Bosses: Fear, Aggression, and Uncertainty. Amount of time before beeping a car stopped in intersection; expensive cars beep more than twice as fast. [Diekman A, Jungbauer-Gans M, Krassnig H, Lorenz S (1996). Social status and aggression: a field study analyzed by survival analysis. *Journal of social Psychology*, 136, 761-768]. Insecure bosses more aggressive toward subordinates they feel made a mistake [Fast NJ, Chen S (2009). When the boss feels inadequate: power, incompetence, and aggression. *Psychological Science*, 20, 1406-1413].
3. Fare dodgers and Black Sheep: When Model Behavior Backfires. Dog owners observed not to clean up after their dogs more likely, on survey, to say there are too many rules and that dog poop is not as large a problem as it was seen to be by those who cleaned up after themselves (dis need for law) [Webley P, Siviter C (2000). Why do some owners allow their dogs to foul the pavement: The social psychology of a minor rule infraction. *Journal of Applied Social Psychology*, 30, 1371-1380]. Groups with recognized cheaters unlikely to discipline cheater if the group can benefit from cheater's contribution because he wore T-shirt of school, but not if wore T-shirt of out-group school. "When the rotten apple is seen as belonging to their group it 'infects' the other apples. When the rotten apple is seen as a rival, an outsider, the cheating decreases, as if it has had a cleansing effect" (57) [Gino F, Ayal S, Ariely D (2009). Contagion and differentiation in unethical behavior" the effect of one bad apple on the barrel. *Psychological Science*, 20, 393-398; Tetlock PE, Kristel O, Elson B, Green M, Lerner J (2000). The psychology of the unthinkable: taboo trade-offs, forbidden base rates, and heretical counterfactual. *Journal of Personality and Social Psychology,* 78, 853-870; Lewis AC, Sherman SJ (2010). Perceived entitativity and the black-sheep effect: when well we denigrate ingroup members? *Journal of Social Psychology*, 150 (2), 211-225]. [Hence need to "other" those perceived to be pulling down the group.] "Dissenters are not necessarily a serious problem. They may even improve the behavior of others" (57).

Fudge. Most people are honest on the honor system, but allow themselves as small (10% to 20%) fudge; above that, guilt or responsibility tends to set in. (Levitt SD, Dubner SJ (2005). *Freakonomics: a rouge economist explores the hidden side of everything.* New York, NY: William Morrow; Gabor T, Strean J, Singh G, Varis D (1986). Public deviance: an experimental study. *Canadian Journal of Criminology,* 28, 17-29; Rabinowitz FE, Colmar G, Elgie D, Hale D, Niss S, Sharp B, Singlitico J (1993). Dishonesty, indifference, or carelessness in souvenir shop transactions. *Journal of Social Psychology,* 133, 73-79; Yuchtman-Yaar E, Rahav G (1986). Resisting small temptations in everyday transactions. *Journal of Social Psychology,* 126, 23-3; Azar OH, Yosef S, Bar-Eli M (2013). Do customers return excessive change in a restaurant? A field experiment in dishonesty. *Journal of Economic Behavior & Organization*, 93, 219-213) Survey by KPMG of American firms showed 21% padded expenses, 18% petty stealing, 15% accepting unauthorized gifts (Kapstein M (2010). The ethics of organizations: a longitudinal study of the U.S. working population. *Journal of Business Ethics,* 92, 601-618. 17% underreporting on IRS returns (https://www.forbes.com/sites/ashleaebeling/2012/01/06/new-irs-tax-gap-report-cheating-still-rampant/#79c271c25043). "You stumble over the threshold, not the fence."

Lying is endemic, especially when there is little threat of being detected. High IQ children lie more. (Lewis M, Saarni C (1993). *Lying and deception in everyday life*. New York, NY: Guilford Press)

Priming is temporary change of mood or propensity to frame context, not a learning effect. No evidence that training with ethics cases has lasting effect on moral behavior.

Apples, Barrels, and Orchards: Dispositional, Situation and Systemic Causes

Consider breaking this into two chapters. The material in this whole report will be heavy going for most readers. It might help to make the servings smaller.

. James Patterson and Peter Kim(1991). The day America told the truth: What people really believe about everything that really matters. New York, NY: Prentice Hall : 91% of Americans admit to lying regularly. 13% support all Ten Commandments.

3. Where Do the Bad Actors Come from and What Can We Do About Them?

I would like to introduce the reader to a very unusual dentist. By a flip of the coin we will make him male and will call him Dr. Noggin. A noggin is a cup or vessel that is too small to hold what it is intended for and sometimes a person's head that has the same characteristic.

Dr. Noggin is well trained, professional, and is active in the dental community. He thinks patients do not place enough value on oral health. He would prefer a world where benefits carriers and the government made it possible for more patients to receive care with less interference. He worries that high educational debt is causing younger practitioners to engage in overtreatment. He has a small "academy," the Noggin Elite for Real Dentistry of like-minded colleagues whose motto is "First do no harm." Sometimes they are called Noggins or more familiarly by the initials of the organization.

But Dr. Noggin has never actually treated anyone. He talks about the highest standards in dentistry – for both specific patients and for the professional as a whole – and it all starts with people just doing the right thing. He has a five-star rating on nonmaleficence. But is he a good dentist?

Reread the immediately preceding paragraphs and change the references from "dentistry" to "ethics." Is it enough to accurately diagnose dilemmas, to express concern using the correct language, to assemble a club of like-minded professionals? Isn't ethics something one actually does? Can ethics be a default position where one is presumed ethical without doing anything to prove it? My father used to say, "Just because a person talks a lot about ethics doesn't mean it's safe to stand beside them."

What has been on offer as dental ethics has tended toward the academic or how near-perfect individuals should behave according to one or another ethical principle. Dentists are a lot like humans and come equipped with diverse and often conflicting and imperfectly worked out life goals, ways of seeing the world, and habits and behavior patterns that have been found to work in experience. They should not be required to surrender who they are as a precondition for being welcomed into the ethical

community. Ethics should be for everyone, not just the elite, and it should start where people are, not where some imagine others ought to be.

Neither do dentists practice in a vacuum. And the circumstances and reward incentives and penalties built into the system are an inevitable part of how dentists practice. We should look into making the changes that are possible to bring about better contexts that promote, or at least do not erode, the natural impulses of dentists to do what is good. That part of the ethics business has received little attention.

Most unethical behavior is done by folks who consider themselves to be ethical. Criminologist Thomas Gabor [(1994). *Everybody does it! Crime by the public*. Toronto, ON: University of Toronto Press] notes that we overestimate the level of violent, physical crime and underestimate the small missteps of many of us and the systemic policies that make it difficult to do good and that tolerate the bad. For example, many times the number of deaths are caused annually by drunk driving or driving over the speed limit than result from terrorists acts or school shooting.

Let's start with some of what is known about human nature in the ethical realm.

Everyone Says He or She is Ethical

We think of ourselves as being ethical, even when in our honest moments we can recall a time or two where we bent the rules. (See Chapter x for a discussion of how dentists actually interpret their basic values.) The problem here is in the way the question is phrased. There is a conflating of a general characterization and a particular action. Humans are creatures that eat and sleep – but not all the time. So can we be ethical even when we take advantage of the benefits carrier or pay staff less than they are worth or neglect to mention a less expensive but acceptable treatment option to the patient? It is the overall pattern of behaviors that matters. It is what those around us can count on as the general way our lives are going. There is a tension between ethical character and ethical behavior. The opposing extremes in classical moral philosophy are Aristotelian virtue ethics that extols a good and balance character [Aristotle (2009). *Nicomachean ethics*. D Ross trans. Oxford, UK: Oxford University Press] and Immanuel Kant's rule-based approach [(1785/1956) *Groundwork of the metaphysic of morals*. HJ Paton trans. New York, NY: Harper Torchbooks] that would damn an individual for a single incident of lying to save the life of an innocent person.

It is unproductive to insist that a dentist is only unethical when he or she engages in a specific action that colleagues would find questionable. That is making perfection the enemy of realistic improvement. On the other hand, we should have our doubts about a colleague who makes it a habit to serve only his or her own good or overlooks opportunities to make the world better for everyone. Professional ethics is two questions, not one. First, how can practitioners be counted on to behavior in a class of situation that concern others? Second, what will they do when the context is dominated by a strong set of circumstances? Both challenges need a lot of attention, but it would be a mistake to think addressing either will solve both. The early 16th century Italian Baldesar Castiglione, wrote in *The Book of the Courtier* [(1507/1967). G Bull, trans. New York, NY: Penguin Books]: Beware the gentleman who is the most chivalrous courtier in the army camp and also the bravest soldier at court.

Fudge and priming

Being ethical is like eating dinner with chopsticks that are a yard long. We need to remember that we are dealing with human beings, not principles. And the humans we are most concerned about have probably managed to avoid the principles most of their lives.

Nina Mazar and colleagues have a theory, and data to back it up, that we all seek to maintain a positive self-image about how ethical we are [Mazar N, Amir O, Ariely D (2008) The dishonesty of honest people: a theory of self-concept maintenance. *Journal of Marketing Research*. 45 (6) 633-644; Mazar N, Ariely D. (*2006*) Dishonesty in everyday life and its policy implications. *Journal of Public Policy & Marketing*. 25 (1), 117-126; see also Leavitt K, Sluss DM (2015). Lying for who we are: an identity-based model of workplace dishonesty. Academy of Management Review, 40 (4), 587-610]. We tend to cut ourselves a little slack. There is a zone in which it is understandably human to bend the rules in particular cases while maintaining an overall positive impression of our own integrity. This is called "fudge." We justify it, if there is a need to do so, on grounds such as "one exception does not alter my nature," "I have been very good without anyone noticing, so they owe me," or "I have direct, private knowledge of the situation that others fail to appreciate." The fudge zone is entirely personal. It varies by circumstance and by how much stress we are under. We are less ethical when tired or hungry or threatened. [Baumeister RF, Vohs KD (eds). (2004). *Handbook of self-regulation: Research, theory, and applications.* New York: The Guilford Press]. Fudge differs from person to person as well. The ones who are a real pain in the anatomy are those who allow themselves a lot more fudge than they permit for others around them. Fudge will tend to flow in self-scoring work settings and organizations that avoid transparency and work to "control the message."

It would probably be a little frightening if others knew exactly how ethical we really are. It would be wholly unrealistic to ask us to appear in public without our self-protective ethical clothes on.

An important feature of fudge is that it can be manipulated. A series of experiments by Dan Aierly and his colleagues [Ariely D (2012). *The (honest) truth about dishonesty: How we lie to everyone – especially ourselves*. New York, NY: Harper; Ariely D. (2009). *Predictably irrational: The hidden forces that shape our decisions*. New York, NY: Harper] demonstrated that people tend to be about as ethical as we expect them to be. This is called "ethical priming." A prototypical study involved asking college students to take a test on numerical puzzle solving. Subjects self-scored their efforts and received a cash reward when turning in their papers based on the number of self-reported correct answers. Although the study was camouflaged so subjects expected their scores and their actual performance could not be matched -- there was a big shredder there -- a system was in place to match actual responses with reported scores while still preserving anonymity. Fudge was wide-spread but usually not more than 10% or 20% Benefits carriers know, based on computer pattern matching, better than professional colleagues or state boards, who is engaged in insurance fraud. They tend to let the small stuff go and do not turn most offenders in to the authorities, preferring to negotiate for a lower level of fudge.

Subjects are primed in a typical fudge study by being asked to engage in an activity prior to solving the puzzles that puts them in a certain mood. For example, some subjects are asked to name as many songs as they can remember that were popular when they were in high school (neutral priming); other are asked to list as many as they can of the Ten Commandments (ethical priming). The first thing these studies demonstrate is that very few of us know the Ten Commandments. The second point is that just trying to recall these moral rules significantly cuts the fudge rate.

Ethical priming has been demonstrated for healthcare professionals [Leavitt K, Reynolds SJ, Barnes CM, Schilpzand P, & Hannah ST. (2012). Different hats, different obligations: Plural occupational identities

and situated moral judgment. *Academy of Management Journal, 55* (6) 1316-1333]. Army medics have two identities: military and health care. The priming in this case involved medics giving opinion about ethical issues in either of two circumstances. In one condition they were wearing their uniforms, in a room decorated with military insignia. In the other, they were in scrubs to a room filled with medical equipment. The questions the medics addressed reflected a disposition to treat others fairly. Ethically ambiguous decisions involved such issues as setting the dollar amount of compensation to families of soldiers killed in combat versus saving the government money. Those primed to activate their professional moral template did in fact demonstrate more ethical opinions than the same individuals who were primed to think of themselves as soldiers.

Priming has been studied directly with respect to dental ethics. Chambers [Chambers DW. (2016). Moral priming and the ACD basic rule. *Journal of the American College of Dentists,* 83 (1), 38-43] reported on involving ethical values of regents and officers of the American College of Dentists using context as a priming factor research [see Appendix A]. [NB: I will begin compiling and referencing the appendices by letter. They will be in no particular order now. That will be arranged properly later.] The regents and officers of the American College of Dentists completed a modification of Jonathan Haidt's Moral Factors Questionnaire [Haidt J (2012). *The righteous mind: Why good people are divided by politics and religion*. New York, NY: Vintage Books]. Embedded within the questionnaire were three additional items designed to measure pro-moral attitudes or openness to moral behavior: (a) "copayments should not be waived," (b) "colleagues working below the standard of care should be reported when justified," and (c) "commercialism undermines dental professionalism." High scores on these items were taken to represent a greater moral commitment to the standards of the profession. Board members and officers completed the same survey twice: once at the college board meeting and then again about one month later where they were primed to take the role of a practicing dentist. Each respondent served has his or her own control.

Context matters [LeBoeuf RA, Shafir E, Bayuk JB (2009). The conflicting choice of alternating selves. *Organizational Behavior and Human Decision Process,* 111, 48-61]. The scores for commitment to professional ethical standards was greater when opinions were taken in the context of a meeting where ethics is a background part of the culture compared with standard practice characteristic served as context. It is encouraging that such a simple effort as assembling as a group where ethics comes up in the conversation can raise the salience of ethical values. It is cautionary that commitments to ethics made in meetings tend to fade in practice.

False consensus, fundamental attribution, and power

We are all a bit biased in how we score ourselves ethically. No surprise: we often simply do not take into account how others view situations where ethics is at stake, and when we do think of how others might see the situation, several well-understood biases creep in. Three important dimensions of this fuzzy view are false consensus, fundamental attribution error, and the blindness of power. These effects are like a moral black hole, making it difficult to escape the force of our own idiosyncratic views of ethics.

In their classic study, Ross, Greene, and House asked a large group of individuals how appropriate a certain kind of behavior was (say cheating on income taxes or coming to an event dramatically underdressed) and how likely others would be to share these perceptions [Ross I, Greene D, House P (1977). The false consensus effect: an egocentric bias in social perception and attribution processes. *Journal of Experimental Social Psychology*, 12, 279-301]. Invariably, respondents overestimated the

proportion of others who shared their views about what is right and wrong [Gilovich T (1990. Differential construal and the false consensus effect. *Journal of Personality and Social Psychology*. 59, 623-634; Krueger I, Clement RW. 1994, The truly false consensus effect: an ineradicable and egocentric bias in social perception. *Journal of Personality and Social Psychology*. 67, 596-610; Marks G, Miller N. 1987. Ten years of research on the false-consensus effect: an empirical and theoretical review. *Psychological Bulletin*, 102, 72-90]. Politicians routinely overestimate how much support they have in the public. Perhaps those who announce ethical standards for the profession overestimate how widely these norms are shared.

A close relative of false consensus is the human tendency to attribute different explanations to our behavior and to the behavior of others, depending on how this affects us. This is called the fundamental attribution error [Ross, L. (1977). The intuitive psychologist and his shortcomings: distortions in the attribution process. In L Berkowitz. *Advances in Experimental Social Psychology*. 10. New York, NY: Academic Press. pp. 173–220; Jones EE, Harris VA. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology*, 3 (1), 1–24]. A patient declines an implant in favor of a removable partial. Is that because the patient fails to value oral health as he or she should or is it because of financial circumstances? Another patient goes out of her way to tell all her friends what a wonderful dentist she has just found (you). Is that because you merit that respect or because this new patient is by nature gullible and generous? What about situations involving the dentist's behavior? Is it because of poor technique or lack of attention that a restoration fails or was it just bad luck on a heroic effort? Who is responsible when the office turns in the best month of production by far in the past several years? Your leadership, staff effort, or a random up-tick in the economy? Naturally there will be many ways to answer these questions, but the evidence is pretty clear that our successes and others' failures will be attributed to personality characteristic and our failures and others' successes will get counted in the "circumstances" column. It is a fundamental error to attribute motives or causes to ourselves and to others in a fashion that always makes us look like the most skillful and ethical agent in the room.

Mentioning the fundamental attribution error is not an appeal for greater humility. Except in some religious traditions, there is no Master Scorekeeper who rewards us for knowing the motives behind ethical decisions. It is, however, an appeal for discussing how we got to where we are and where we might go with others who have a stake in the matter. Going off on our own without consulting others is risky; telling others what their true motives should be is pretty much a non-starter.

Some individuals are more apt to take into consideration the effects of their behavior on others, in a word, to frame situations as ethical. There is a body of research that has appeared in the business literature studying who is likely to reveal full information in a transaction and who is likely to withhold it for personal gain [Acquino K (1998). The effects of ethical climate and the availability of alternatives on the use of deception during negotiation. *International Journal of Conflict Management*, 9 (3), 195-217]. The analogue in dentistry would be informed consent. Other questionable behaviors such as taking more than one's fair share and imposing policies that present a hardship on others have been studied [Ashforth BE, Gioia DA, Robinson SL, Treviño (2008). Re-viewing organizational corruption. *Academy of Management Review*, 33 (3), 670-684]. Those who have natural positions of power (who are generally not answerable to others) are most likely to act unethically [Hegarty WH, Sims HP (1978). Some determinant of unethical decision behavior: an experiment. *Journal of Applied Psychology*, 63, 45, 1-457]. In something like a priming effect, this induced unethical behavior flowing from power can be artificially induced. In a typical study, individuals in groups are first given a "test of leadership ethics." Those who believe they have done well on the test are more likely to abuse their peers in the subsequent role playing exercises. This is true despite the fact that the reported high scores are phony, assigned at random. In a clever study, researchers [Kabanoff B (1991). Equality, equality, power, and conflict. *Academy of Management Review*, 16, 416-44] recorded traffic behavior at an intersection. In

particular, they were interested in law-breaking such as running a red light and violating norms such as honoring right of way. They recorded the make and year of the vehicles involved. Late model, expensive cars such as BMWs and Mercedes were significantly less ethical. In a very early paper by Chambers [Chambers DW, Eng, WRL, Jr. 1994). Practice profile: the first twelve years. *CDA Journal*, *12* (12), 25-32], dentists in their first 12 years of practice were asked to identify the most troublesome aspects of practice and how they tended to handle them. Technical issues did not make the grade. The most prominent concerns were uncooperative staff and patients and unethical senior dentists. But the response to these problems is what is of interest. Patient and staff problems were addressed by explaining to others how the dentist excepted things to be managed. Difficulties with other dentists, especially owner dentists, were handled by tentative negotiation. The first kind of problem was deemed easier to solve than the latter.

Dentists, because they are in the top 2% to 3% of American income earners and because they are usually the dominant person in small, stable work groups, are at heightened risk for substituting power and their conceptions of ethics in place of negotiation and mulita-party ethics.

Although there are few really bad actors in dentistry, many of them would not self-identify in that category. In fact, it would not be surprising to find that those most concerned to improve their ethical character are already among the most ethical. Courses on ethics and books on the subject are not best sellers, but they tend to be ignored by those most in need of them. A big fudge zone, living and working in environments that do not prime ethical behavior, false consensus, fundamental attribution error, and the illusion of power work to protect the bad actors. The current model of ethics education may not be the approach we need.

Other Are Doing It

The most common response offered when someone is called out on questionable ethical behavior is to cite a justificatory principle. "We have to make it illegal to practice telemedicine because somebody could get hurt by an incomplete diagnosis." The justification is correct: if we could pass laws reducing improper diagnosis, we should do so. The justification given need not be the only consideration, however. Some may argue that the likely benefits of telemedicine, with reasonable regulations, will outweigh the likely harms because more people will be served earlier. The justification does not even have to be the leading motive embraced by those who campaign for or against change. "I both protect my income and the public by curbing telemedicine, so naturally I will talk about the latter." Very few people advocate for a public good that has a personal cost.

Another commonly given justification for questionable ethical conduct is "everyone else is doing it." [Thomas Gabor (1994). *Everybody does it! Crime by the public*. Toronto, ON: University of Toronto Press; McCabe DL, Klebe L, Treviño L, Butterfield KD (2001). Cheating in academic institutions: a decade of research. *Ethics & Behavior*, 11 (3), 219-232] This is a powerful defense: surely it could not be wrong to follow what many others are doing; after all they can see the posted signs saying "thou shalt not" just as clearly as everyone else so they must know something important that justifies ignoring them. Besides, failing to cut the common corners is a sure recipe for being left behind: we need to keep everyone on a level playing field. It is nice to be noble, but often expensive. Most people are willing to be ethical as long as others are. But there is so much evidence that justifies being suspicious that we are being played for a fool. After all, some say, it should be sufficient to learn what should be done under textbook circumstances.

Dentists set the standards for each other

All dentists are ethical actors in two different ways. They often choose to behave one way or another out of a sense of ethical commitment, and their behavior becomes a reference point for their colleagues. This includes bad actors, who both engage in damaging practices and lower the standard of the profession. Devious dentists hurt patients; they also send signals to their peers. Even the habit of being ethically uninvolved is contagious.

For this reason, it makes no sense to approach ethics in a profession on the assumption that all professionals are equivalent individuals and the job of building a strong profession is to reach as many dentists as possible and inoculate them ethically before placing them back into an environment that is not supportive. It is much too expensive to go at it this way, many are uninterested, and the treatment is unlikely to hold.

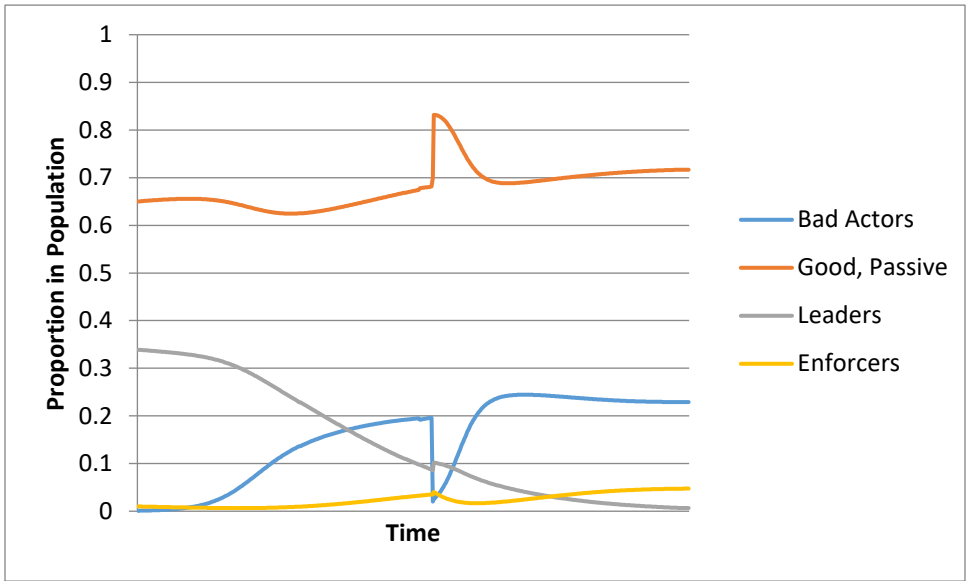
Research on ethics as a system of behavior is virtually nonexistent. The classical RCT model, with one or more independent variables and an outcome variable of interest, is inadequate. The outcome variable, better ethical behavior, loops back to affect the conditions that cause improvement among others: things spiral up or down. Some people can be trained to sound ethica,l but they will not act that way unless the conditions are favorable. This is a conceptual challenge.

One approach to studying systemic ethics is to use the methods of modern systems dynamics or computer simulation. The study by Chambers [Chambers DW (2014) Computer simulation of dental professionals as a moral community. *Medicine Health Care and Philosophy*, *17*, 467-476] is the only one known in professional ethics. See Appendix C. The key to this study was to consider the relationships among ethical actors rather than the character of the actors themselves. For example, when a bad actor in dentistry practices in the same community as a typical practitioner, it works slightly to the benefit of the devious dentist and slightly to the detriment of the good dentist. If this condition continues because it is not worth the effort to make an issue out of it, there will be a slight increase in the number of dentists who overtreat, advertise in a deceptive fashion, keep shabby records, and ignore comprehensive patient care. A few of the good dentists will be tempted to gravitate in this direction. We could also imagine a community with an ethical leader who is willing to confront the bad actor, as is expected by the ADA Code of Professional Conduct (4.C). The interactions most likely will cause a slight curbing of the devious dentists' behavior, but at a small personal cost to the ethical leader. We can also imagine an interaction between a bad actor and an enforcer agent such as a state dental board. Generally, these confrontations go rather badly for the bad guy and are slightly to the benefit of the enforcer (after all that is why they exist and receive funding). Irving Goffman [Goffman E (1959). *The presentation of self in everyday life*. New York, NY: Doubleday Anchor] has pointed out a paradox with respect to interactions among fraudsters. They naturally limit their own numbers: a con artist depends on there being enough honest folks to make their false actions credible. There are a dozen other relationships, such as ethical dentists and other ethical dentists taking each other for granted and dental boards supporting each other.

A 4 x 4 matrix for the possible effects of (a) bad actors, (b) ethical but passive dentists, (c) dentists who are ethical leaders, and (d) enforcers is created. No one knows in detail what the true values are that belong in this matrix, but anything outside a very narrow range of common sense will cause the system to collapse. So such values can be ignored. For example, bad actors cannot go unchecked, and the checking will certainly cost something. In the research reported by Chambers, the values were set initially by taking a survey of officers and regents of the American College of Dentists. Baseline values, how many of each type of agent are present to begin with, are also needed. As it turns out, the 4 x 4

matrix of interactions is critical and the baseline matters little. In the published study, it was assumed initially that about two-thirds of dentists were good but passive professionals and about one-third were ethical leaders who were willing to take steps to ensure the ethical tone of the profession. The system was stocked at the beginning with 1% enforcers and .01% bad folks. The board members of the American College thought this number of devious dentists was too low, placing the estimate at about 20%.

The computer model runs on an Excel spreadsheet. The type of program is called a Markov replicator model. The basic logic is that during the first time period, all agents interact with all others and the results of these interactions are carried forward to the second time period as the sum of the positive and negative interactions. The system drifts toward having more of the kind of agents that are rewarded in the system. The figure below shows what happens over the first 1,000 iterations with a typical set of assumptions.



It is obvious that the network of dentists stabilizes fairly quickly. Each type of agent reaches a more or less fixed proportion of the population. This is determined by the relationship among the agents and not by characteristics of the agents. To demonstrate this point, consider the deflection for bad actors in the center of the graph. At this point the computer program as adjusted so that 90% of all devious dentists would be converted to good dentists, or even leaders in a few cases. This might be thought of as a massive continuing education effort where every single bad actor was trained and nine out of ten of the training sessions was so successful that these misguided individuals became good practitioners, indistinguishable from those who had always been good folks. The very quick reversion to the status quo ante reflects the relative strength of the norms in the practice community over the lessons in educational programs [Treviño LK, Youngblood SA (1990). Bad apples in bad barrels: a causal analysis of ethical decision making behavior. *Journal of Applied Psychology*, 75, 378-385]. Perhaps there is even a hint of "revenge," as a dentist with a disciplined license might feel when required to take ethics courses as a condition for staying the judgment. See Chapter 5 on education.

The system is sensitive to the assumptions about how the various agents interact with each other. Typically, jiggering the relationships within a narrow range produces slight changes in outcomes, but

when certain thresholds are exceeded, it become nonsense. This is very Darwinian: most combinations, including some that look good in theory, either cause the system to crash or are quickly corrected by reality. There are several powerful lessons to be drawn from this simulation.

- Systems establish stable patterns based on the interactions among their members.
- Each system will have exactly the proportion of bad actors that it tolerates.
- The number of bad actors has a greater influence on increasing the number of enforces than does the number of enforces have on decreasing the number of bad actors.
- The proportion of bad actors increases at the expense of the leaders, not the passive, good dentists

The picture suggested by this simulation contains some surprising suggestions. First, there will always be a certain number of bad actors. Talk of ridding the profession of them is just hyperbole. The system is designed for a certain amount of unethical behavior, although systems can be designed to have a smaller proportion. Second, the bad behavior of some dentists will not be an especially grave concern to most dentists. It is apparent in the trend lines in the figure that the proportion of passive dentists, those who just take reasonable good behavior as a given, remains constant as the proportion of bad folks works up toward a stable point, and after that it does not matter. The ones who suffer are the ethical leaders, and of course the public. The single factor that has the greatest influence on the proportion of bad actors is, surprisingly, the relationship between ethical leaders and passive, good dentists. This can be determined by adjusting the relationship. The most powerful force to reduce bad actors is how the leadership works with the passive members. It is foolish to try to punish the bad folks out of dentistry or to educate the whole profession in good standards. What matters is leaders narrowing the fudge and creating the priming environment that raises the entire level of the system. The conversation among the active and passive parts of the ethical dental community is critical.

Looking for Bad Actors

Estimating how many dentists are bad actors and knowing what to do about them depends on how a "bad actor" is defined. One way to see the profession as being "adequately" ethical is to overlook the problems. The best measuring tool would be to ask "what is the proportion we need to do something about?" That could be a low bar. I have heard dentists tell students in an ethics course that there is never a situation where a dentist should refer a colleague for disciplinary action. On several occasions in preparing for this report, I have asked groups to estimate the proportion of dentists who have overtreated or overcharged patients during the past several months. The estimates range from 20% to 30%. See Appendices C and y. The Gallup poll of trust in the professions regularly puts the proportion of dentists trusted by the public to have their best interests in mind at around 60% [https://news.gallup.com/poll/1654/honesty-ethics-professions.aspx]. That leaves a substantial number who have doubts, some large enough to cause patients to stay away from offices or to switch to different ones. See Appendix z.

In this section we will look at those who are arguably the most rotten apples: those dentists who have disciplined licenses and who engage in gross or continual faulty treatment.

<u>Disciplined Licenses</u>

A dental license is granted by the state as a permit to engage in a commercial activity. There are requirements for obtaining a license and for maintaining one. When there are paperwork irregularities (such as failure to complete continuing education requriments or disclose existing sanctions when

moving from state to state) or when complaints are received and investigation reveals probable violation of regulations, a dentist's license is subject to potential sanction or discipline. Management, investigation, and sanctions are administered by a branch of the state government, usually in the Department of Consumer Affairs or a similarly named group, often known as the State Board of Dentistry or the Board of Health Practice. About 20% of complaints lodged with medical boards are investigated and about 1% result in disciplinary action [aspe.hhs.gov/basic-report/state-discipline-physicians-assessing-state-medical-boards-through-case-studies]. Among dentists, from 2 to 8 in 1,000 practitioners are sanctioned each year, with consistent large discrepancies from state to state. Differences exist from state to state in how easily one can access these records. Disciplinary actions of state regulatory boards are public record.

Records were obtained for 255 dentists for whom disciplinary action was taken between September 2015 through July 2017 in four states: California, North Carolina, Ohio, and Oklahoma. There records were read several times and information about the nature of the practice that led to the sanctions, date on which licensure was granted, the nature of sanctions imposed, practice location and other demographic information were coded. The full report appears in Appendix D; a paper based on this work was published in the American College journal [Chambers DW (2018). Disciplined Dental Licenses: an empirical study. *Journal of the American College of Dentists*, 85 (2), 30-39].

The types of behavior that resulted in disciplinary action fell into three categories, with roughly one-third in each type. These are shown in the table below.

Table 1. Characteristics of disciplined licenses by type of inappropriate behavior

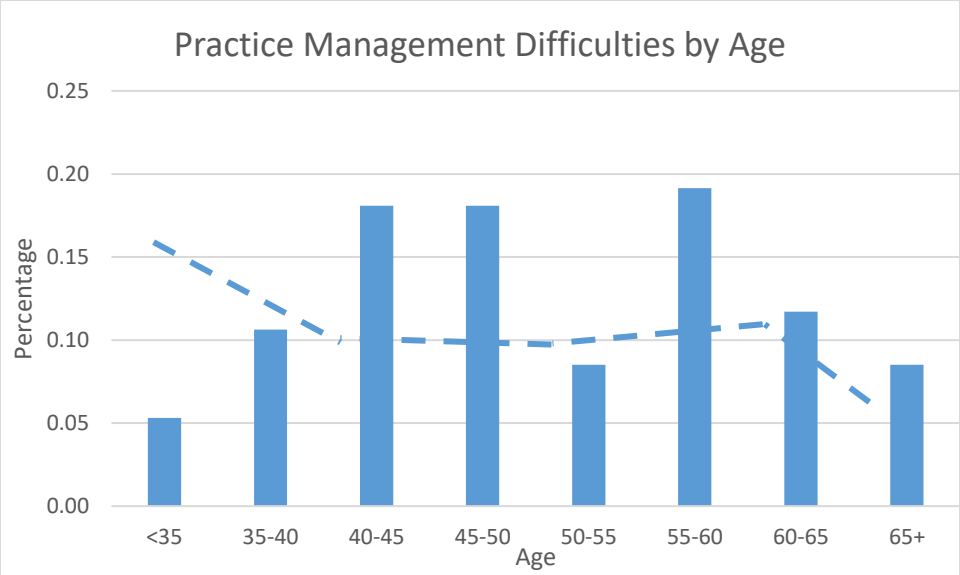
Behavior	Technical	Practice Management	Personal
N	86	98	71
Diagnosis	64%	27%	4%
Treatment	65	25	4
Overtreatment	9	38	3
Case management	24	20	0
Incomplete records	42	26	3
Informed consent	27	16	1
Overbilling	7	39	6
Abandonment	0	6	1
Unlicensed practice	1	20	1
Overprescribing	0	13	7
DUI	0	1	18
Drugs	0	4	32
Cognitive impairment	0	0	17
Sexual misconduct	0	1	13
CE/Paper work	1	4	20
Other crimes	0	3	14
Deaths	7	1	0
Multiple patients	17	33	11
Court records	0	18	38

Out-of-state	1	0	10
Repeat offenders	7	10	25
ADA membership	40	37	35

"Technical" problems included failure to diagnose, poor quality treatment, inadequate records, lack of informed consent, and cases management (usually performing treatments out of sequence). The second category, "practice management," concerned improper case management, overbilling, overtreating, some issues of diagnosis and treatment quality, incomplete records, and use of unlicensed staff. About a third of these problems involved multiple patients. The third category was labeled "personal" because it involved patient care only indirectly. In this group were DUI, drug use, cognitive impairment, sexual misconduct, and civil crimes. Many of the cases in the latter category (and those involving patient death) came to the board from other state agencies. There was a single incident of a technical procedure, an overhang, of the type tested on one-shot initial licensure examinations. One state only disciplined cases of personal drug use.

There were significant predictors of sanctioned practice such as multiple offices, fictitious business names, type of patient treated, and so forth, and these are discussed in Chapter X.

One characteristic that was strongly associated with bad acting was age of the practitioner: but the direction of that assocaiton was unexpected. In the table below, age distribution of dentists sanctioned for inappropriate patient management (overtreatment, overbilling, treating out of sequence, and other abuses of patients) are represented by the columns. There is a bimodal pattern, with most incidents occurring among dentists in their '50s and '60s. This corresponds with previously reported findings that the average age of physicians with disciplined licenses is in the mid- to upper-fifties [Papadakis MA, Arnold GK, Blank LL, Holmboe ES, Lipner RS. Performance during internal medicine residency training and subsequent disciplinary action by state licensure boards. *Annals of Internal Medicine*, 2008, 148, 869-876]. The dashed line in each graph represents the proportion of all practicing dentists by age. Younger dentists are conspicuously underrepresented among those with disciplined licenses. The graphs for disciplined licenses for technical reasons and for personal reasons are similar, with the latter type of problem, which includes alcohol and drug abuse, being even more skewed toward older practitioners.



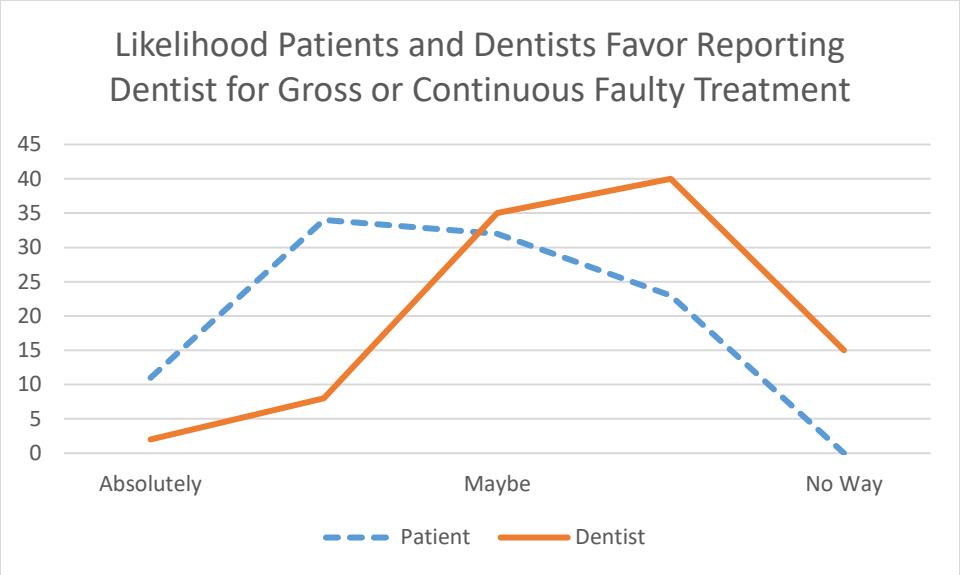
These findings give the lie to claims sometimes heard that new dentists abuse their patients because of their high debt load. It also offers insight into the nature of unethical behavior. A case can be made that unethical practice is a habit rather than an event. It seems to take some time for patterns of poor practice to establish themselves. Probably, there is a small and tentative misstep at the beginning. Because it is left unchecked, either by untoward consequences or by intervention from professional colleagues, it multiplies in frequency and magnitude. The habit of unethical behavior continues until it can no longer be ignored and is reported, usually by patients. The proportion of such behavior that is identified and disciplined, versus that which continues, is unknown.

Justifiable Criticism

Justifiable criticism does not mean offering constructive comments to a colleague about how her or she could become a better dentist. Instead it is an obligation imposed by the ADA under penalty of losing one's membership to report suspected instances of gross or continual faulty treatment to a third party that has the authority to sanction the dentist of concern. It is correct that the supporting Advisory Opinion in the ADA Code that explains how the Council on Ethics, Bylaws, and Judicial Affairs might interpret failure to report a colleague mentions that it would be appropriate under some circumstances to consult the previous treating dentist if there is a question regarding the circumstances under which care was provided and that irresponsible criticism is unwarranted. But there is no positive obligation in the ADA Code to help one's colleagues. (See also Appendix Q for information about how well the ADA Code is understood by practicing dentists.)

A series of studies was undertaken in order to better understand how dentists interpret their professional obligation with respect to bad actors who are their peers. This included polls of both dentists and patients regarding a common situation involving a "third opinion," a survey of dentists about how "reportable" they feel certain mistreatment might be, videotaping of 21 dentists working through a series of situations where gross or continual faulty treatment seems to be present and all coming from the same practitioner, and a survey of patients regarding the severity they attach to certain untoward outcomes. The full report was published in the *Journal of the American College of Dentists* [Chambers DW (2017). What dentists do when they recognize faulty treatment: to tattle or build moral community. *Journal of the American College of Dentists*, 84 (2), 32-66] and appears as Appendix B.

As shown in the graph below, patients are more likely than dentists are to expect that their current dentist will become involved in addressing work performed by a previous treating dentist when a problem is identified.



A survey of 68 patients found differences between patients and dentists (who were surveyed in a separate study). But there were also differences with respect to information expected from the consulting dentist and about expectations for the relationship that exists among dentists. Dentists were twice as likely to let an incident pass without involving either the patient or the treating dentist as were patients (40% versus 20%). Both dentists and patients wanted the treating dentist involved, but with substantial differences in the extent to which patients were to be informed and involved. Dentists chose to engage patients about 40% of the time, but patients expected to be informed and to participate in decisions about correcting the problem in 80% of the cases. At issue here is whether the patient is informed of his or her present oral condition and what needs to be done about it. Dentists seem to prefer that this remain an issue kept to the current dentist, or perhaps mentioned to the previously treating dentist. Less desirable would be engaging both the patient and the previously treating dentist. The least attractive response would be to report cases of gross or continual faulty treatment to the authorities. Most dentists consisted a case involving previous poor work to be a new case, needing attention that they would be willing to provide if they felt it could be done without difficulty.

This order of preferred means of handling the problem of poor work by colleagues would be consistent with the findings from the videotaped simulations where a specialist observed a pattern of continual faulty treatment by a single referring general practitioner. In those exercises, dentists who constituted the experimental sample were more likely to engage the dentist than the patient. Few referred the matter to the state board or other agency, often commenting that the previous treating dentist was incompetent, but not in an actionable way, based on as many as ten botched cases in a row. It was stated that such a string does not necessarily constitute evidence of “a pattern.” The reasons respondents offered for their behavior are summarized in the table below. The incidents ranged from a large overhang or an open margin to prepping anteriors that were periodontially unstable for veneers and leaving an endo file in the patient’s sinus without telling them of the fact.

1. *Alerting the treating dentist is sufficient:* When an action was taken by the consulting dentist it was most often first and entirely a matter of altering the treating dentist to the presence of a condition that might be considered below the standard of care.

   "I think he is aware now that I have mentioned the open margin. I trust him."

2. *Patients are informed tenuously:* Patients were often informed of the existence of a compromising condition, although that information may have been ambiguous, and consulting dentists resisted responding to patients other than regarding the technical nature of their clinical condition.

   "Now I'm just going to retreat this [poorly done endo] and not say anything to the patient. If he asks me whether that is because Dr. X did not do it right, I'll just make up something about new circumstances requiring special additional care."

3. *Reframing the situation as convenient hypotheticals:* Consulting dentists reframed the presenting case as either so underdefined as to excuse involvement or by imagining additional facts that excused the need to become involved.

   "The important thing is to resolve these matters ethically, and to do the right thing. These things need to be handled right and resolved peacefully, I mean without entanglements. I'm not sure specifically what I would do."

4. *Patterns and general conclusions are avoided:* Individual cases tended to be considered separately; the dominant context was the current clinical situation and elements of comprehensive care and generalizations about the treating dentist were suppressed.

   "There's no line that separates competent from incompetent."

5. *Responsibility for corrective action rests with the patient:* The consulting dentist was seen as responsible for addressing the referral (if indicated), the treating dentist was responsible for restoring the patient to prior clinical standard, and the patient was responsible for everything else, including action against the treating dentist for general incompetence.

   "I would not report this matter myself. I would refer the patient with the complaint to PR."

6. *There is no sense of general professional responsivity:* There was no "we" in these cases; treating dentist, consulting dentist, and patient had separate interest that were confined to individual treatment and they did not work together for a general resolution of difficulties or a general elevation of the profession.

   "If the guy doesn't respond [to my feedback], I'd just let it lie. Pretty soon something really bad will happen and then maybe somebody will do something."

In a separate study of 62 dentists, the same set of incidents suggestive of poor quality treatment from the videotape study were judged in terms of severity, as measured by willingness to refer the case for possible disciplinary action. As a further variable of interest, the dentist who was associated with the poor treatment was described as either a senior dentist in the community, a new member of the

profession, or a candidate on a one-shot initial licensure examination. Although there was a slight tendency to judge the licensure candidate more harshly for the same outcome, the major determinant of propensity to refer for discipline was each reviewing dentist's own personal standards. Eighty-five percent of the variance in propensity to refer was due to the reviewing dentist's characteristics, not features of the previous treating dentist or nature of the faulty treatment. The likelihood of referring for the same type of incident ranged from 6% to 92%. The type of problem (overhang versus file in the sinus, for example) accounted for only 10% of the variance. The experience and community involvement of the previous treating dentists was of little concern, accounting for only 5% of the variance.

The extent to which one wished to become involved in correcting the low end of care in the profession or raise the performance of one's colleagues in a personal choice. The range of concern with better dentistry is enormous, and it does not appear to be related to either who is causing the problem or the objective nature of the conditions. Dentists seem to set their individual standards for participating in the good of the profession, and they are capable of insulating themselves in that "good but passive" category both by choice and because they practice independently. (See Chapter x for reports of focus groups of dentists, patients, and public officials that provide detail on this point.)

Conclusion

Because of the nature of dental practice, dentists can create worlds where they insulate themselves from others seeing how they practice or becoming engaged with how others practice. There is ample room for fudge and self-priming. Power and functioning in a system where a number of bad actors can be tolerated without damaging the "good enough" favors a passive response to ethics. Bad actors come from the way the system is designed. The easiest way to change the proportion of bad actors is to change the system.

Doing something about ethics will remain a low-priority issue until the context in which dentists practice changes. As that is beginning to happen now (see Chapter x for a discussion of the emerging pressures on the traditional model of dental practice), we will anticipate that the pofession will fight against change rather than becoming involved in negotiation the best possible changes possible. The profession as a whole will not register a noticeable change in its ethical tone by doubling the small number of dentists who learn about ethics in a formal setting or the quality of that instruction. The ethics training of the past several decades will only make ethics sparkle more brightly as an ornament for the profession.