

A Clinician's Approach to Clinical Ethical Reasoning

Lauris C. Kaldjian, MD, PhD,^{1,2} Robert F. Weir, PhD,^{2,3} Thomas P. Duffy, MD⁴

¹Division of General Internal Medicine, Department of Internal Medicine, ²Program in Biomedical Ethics and Medical Humanities, and ³Department of Pediatrics, University of Iowa Carver College of Medicine, Iowa City, IA, USA; ⁴Department of Internal Medicine, Yale University School of Medicine, New Haven, CT, USA.

We offer a systematic strategy that situates *clinical ethical* reasoning within the paradigm of *clinical* reasoning. The trajectory of this strategy parallels clinical reasoning: a plain statement of the initial problem, careful gathering of data, a differential diagnostic assessment, and articulation and confirmation of a justified plan. This approach pays special attention to the goals of medical care, because so much depends on whether or not physician and patient share the same goals. This approach also addresses the heterogeneity of clinical problems that at first appear ethical and acknowledges the ethical pluralism that pervades clinical ethics.

KEY WORDS: *clinical ethics; decision making; ethical analysis; professional education; ethical pluralism.*

DOI: 10.1111/j.1525-1497.2005.40204.x

J GEN INTERN MED 2005; 20:306-311.

Physicians can be more effective and confident in their responses to ethical challenges in patient care if they learn to address these challenges in a systematic fashion. To be useful, a systematic approach to clinical ethical reasoning needs to be accessible to clinicians and should resonate with their style of clinical reasoning. We offer such an approach in this article (Fig. 1).

The strategy of our approach is to incorporate existing bioethical concepts into the "thinking space" of a clinician by situating *clinical ethical* reasoning within the paradigm of *clinical* reasoning (Fig. 2). The method we propose partially resembles other approaches in clinical ethics,¹⁻¹⁰ but it is distinguished by deliberately adopting the trajectory of clinical reasoning. By emulating clinical reasoning, our approach recognizes that ethical problems in clinical medicine usually do not arrive prediagnosed but emerge through a dynamic process of assessment. The differential diagnostic character of our approach also recognizes that problems which at first seem ethical may turn out to be primarily related to insufficient communication, interpersonal conflict, or incomplete awareness of existing medical information and options.¹¹⁻¹³

Our approach also incorporates ethical pluralism¹⁴⁻¹⁶ in order to make diverse sources of ethical value explicit and to reflect the diversity clinicians bring to their ethical deliberations. We recommend 6 familiar sources of ethical value that can be used to support decision making in clinical ethics but also invite clinicians to incorporate their preferred sources into its scheme. Contrasting sources of ethical value expand the angle of moral vision, but a plurality of values can also cause tension: physicians may have to choose a single course of action in the face of multiple competing values.¹⁷

Accepted for publication July 1, 2004

The authors have no conflict of interest to report.

Address correspondence and requests for reprints to Dr. Kaldjian: Department of Internal Medicine, SE605 GH, University of Iowa Carver College of Medicine, 200 Hawkins Drive, Iowa City, IA 52242 (e-mail:

To illustrate the use of our approach, we offer a patient case and unfold its discussion as the approach is presented: a 68-year-old woman is admitted to the hospital with right-sided weakness and confusion. Her examination reveals unintelligible vocalizations, intact pupillary reflexes, absent gag reflex, impaired swallowing, and right hemiparalysis. Magnetic resonance imaging of the brain shows acute infarction involving the left frontal, parietal, and temporal lobes. Supportive care is instituted, including intravenous hydration and a nasogastric feeding tube. The patient does not have an advance directive or medical power of attorney; her family decides that she should not be resuscitated in the event of cardiac arrest. Her mental status fluctuates; at times she is able to recognize her family. On hospital day 4 she pulls out her nasogastric tube and it is reinserted. On hospital day 6, the attending physician recommends insertion of a percutaneous endoscopic gastrostomy (PEG) tube for longer-term enteral feeding. The patient's family objects, requesting "comfort measures only." The physician explains that the prognosis is too uncertain to justify a shift to palliative care and emphasizes the need for nutritional support while neurological rehabilitation is attempted and the prognosis clarified. The family disagrees and requests that the patient be discharged home where they are willing "to let her go."

APPROACH

1. State the Problem Plainly

This first step identifies what has triggered the perception that an ethical problem exists. Like the "chief complaint" that begins an evaluation in clinical medicine, the problem stated in straightforward terms helps focus attention on the problem with as little prejudgment as possible.

Case: The physician believes a PEG tube should be inserted, but the family disagrees.

2. Gather and Organize Data

a. Medical Facts. The principal medical facts of the situation must be defined, including the patient's condition, diagnosis, prognosis, mental and emotional status, and decision-making capacity, as well as the benefits and burdens of treatment options and their probabilities of success.

Case: The patient has had an acute stroke resulting in aphasia, impaired swallowing, hemiparalysis, and fluctuating mentation. Her prognosis is unclear. She does not have decision-making capacity. PEG tubes have known risks, but they avoid the discomforts and limitations of nasogastric tubes.

b. Medical Goals. Articulating the goals of care facilitates discussion that is oriented by concrete and feasible objectives. Common goals include preventing disease, curing disease, restoring function, relieving pain, prolonging life, and comforting

1. State the problem plainly	
2. Gather and organize data	
a. Medical facts	
b. Medical goals	
c. Patient's goals and preferences	
d. Context	
3. Ask: Is the problem <i>ethical</i> ?	
4. Ask: Is more information or dialogue needed?	
5. Determine the best course of action and support it with reference to one or more sources of ethical value:	
<i>Ethical principles</i>	Beneficence, nonmaleficence, respect for autonomy, justice
<i>Rights</i>	Protections that are independent of professional obligations
<i>Consequences</i>	Estimation of the goodness or desirability of likely outcomes
<i>Comparable cases</i>	Reasoning by analogy from prior cases
<i>Professional guidelines</i>	e.g., AMA Code of Ethics, ACP Ethics Manual, BMA Handbook
<i>Conscientious practice</i>	Preserving the personal and professional integrity of clinicians
6. Confirm the adequacy and coherence of the conclusion	

FIGURE 1. A clinician's approach to clinical ethical reasoning.

about goals versus disagreements about different ways to accomplish the same goal. Medical goals have received considerable attention in end-of-life care discussions¹⁸⁻²¹ but should not be limited to this setting.

Case: Medical goals include relieving discomfort, maximizing neurological recovery, and prolonging life in order to clarify the prognosis.

c. Patient's Goals and Preferences. The medical goals of care need to be placed in the context of the patient's assessment of the benefits and harms posed by treatment options. A patient's values and beliefs will define his or her personal goals and determine how best to achieve them.^{20,22} Discussion of goals may prevent misunderstandings that arise when individual diagnostic or therapeutic decisions are isolated from the overall clinical situation (the "big picture"). Refusal of medical advice should be a red flag inviting deeper exploration of the patient's goals and preferences and should not automatically be interpreted as a lack of decision-making capacity. When a patient lacks decision-making capacity, advance directives and valid surrogate decision makers should guide the determination of the patient's wishes and best interests.

Case: The patient lacks decision-making capacity and has no advance directives; her husband (with family) is her surrogate decision maker. He believes that she would prefer to die comfortably at home rather than have a PEG tube inserted and

d. Context. Patients bring to the medical encounter a personal context that may bear heavily on their perceptions, preferences, and understanding of options. They may be influenced by family bonds, social or economic circumstances, prior health care experiences, a history of racial discrimination, or religious traditions. Physicians have contexts that are shaped by professional culture, economic conditions, legal obligations, and health care systems, and they work alongside clinicians in other health disciplines who have their own moral standing.

Case: The family appears to have the patient's best interests in mind. No institutional or economic constraints on the decision-making process are evident. In the state where the patient resides, statutory law leaves open the possibility of legal liability for withholding life-supporting therapy, because the patient does not have an advance directive and is not deemed terminally ill or permanently unconscious.

3. Ask: Is the Problem *Ethical*?

As with assessment in clinical medicine, this is a process of sifting and weighing that culminates in an interpretation of the problem that was stated plainly at the start. The task is to determine whether the problem is primarily ethical, that is, whether it involves moral questions related to values, principles, commitments, obligations, rights, and so on. A differen-

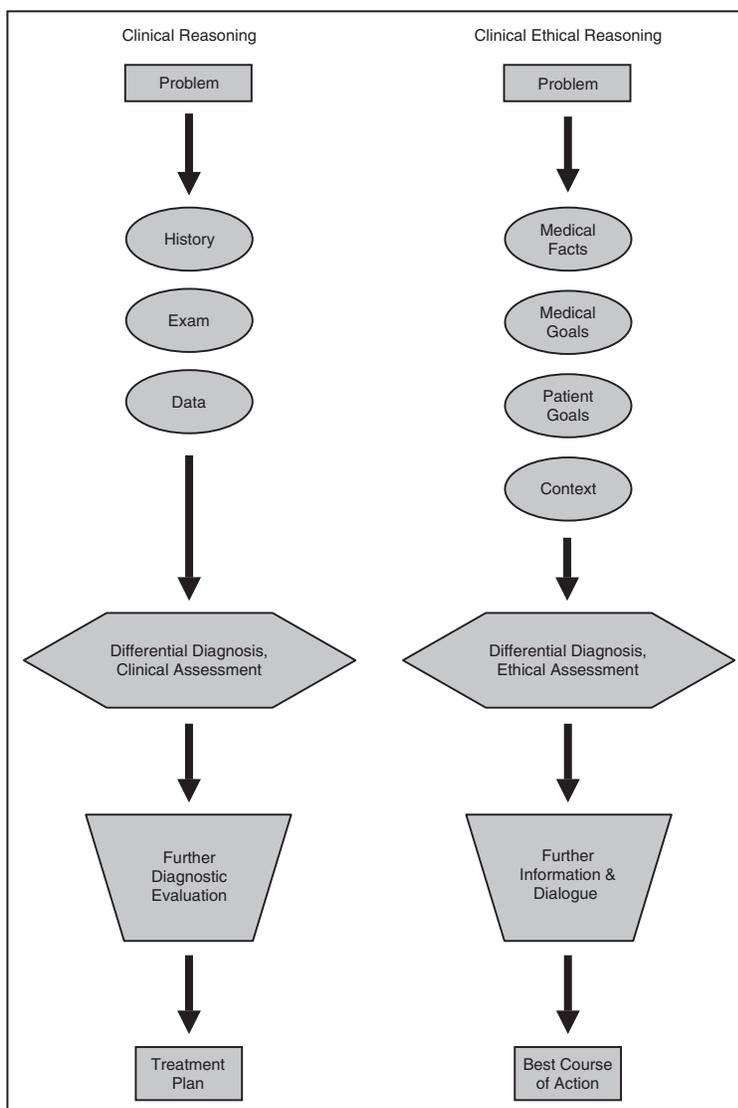


FIGURE 2. Comparison between clinical reasoning and clinical ethical reasoning.

communication, strained interpersonal relationships, or incomplete exploration of medical alternatives. If the problem is ethical, it should be defined in order to confirm (or question) a shared understanding of the problem. Possible conflicts between competing values should also be identified.^{3,4,23,24}

Case: The disagreement between physician and family regarding the insertion of a PEG tube is an ethical problem involving competing assessments of what is in the patient's best interests.

4. Ask: Is More Information or Dialogue Needed?

Problems that appear to be ethical frequently arise because a clinical decision is premature. This error in clinical medicine occurs when clinicians leap to incorrect conclusions because of insufficient data. The physician may need to collect more information about a patient's goals, search the medical literature to explore medical alternatives, engage administrators and insurers, or take steps to repair misunderstandings or re-

sights that come through understanding the unique details of each patient's story.^{25,26} Some ethical and nonethical problems will resolve solely with the addition of more information or dialogue.

Case: The physician should consult experts and literature regarding prognosis in patients with middle cerebral artery infarcts and the effectiveness of PEG tubes in stroke rehabilitation. The necessity of a PEG tube at this exact juncture should be probed. Dialogue with the family should explore the grounds of their belief that the patient would not want a PEG tube.

5. Determine the Best Course of Action and Support Your Position with Reference to One or More Sources of Ethical Value

a. Principles. The "four principles" have arguably become the most common ethical currency in North American and British biomedical ethics.^{5,10,15} Ethical principles are general obligations that guide our actions; they should be followed, but need

principles help us bridge the gap between moral rules and the complex realities of human life.²⁸

Beneficence. This is the obligation to act for (and maximize) what is beneficial to the patient. The benefit of greatest interest to clinicians is health.

Nonmaleficence. This is the obligation to avoid causing harm to the patient. Harm may occur by intention or negligence, and it may be physical, psychological, social, financial, or spiritual.²⁹

Respect for patient autonomy. This is the obligation to respect a patient's preferences and decisions according to their beliefs and values. Patients with decision-making capacity are presumed to be autonomous; those without this capacity require surrogate decision makers. When patient autonomy conflicts with physician advice, it is important to understand that acting for a patient's good (beneficence) includes respecting that patient's assessment of his or her own good.³⁰ Respect for patient autonomy should avoid imposing unrealistic expectations on patients who sometimes do not know what they think or want.³¹

Justice. This is the obligation to be fair and impartial and to treat similar people in similar situations the same way. Another meaning of justice is to give to each person their "due" as persons endowed with human dignity.³² Injustice in medicine occurs when clinicians discriminate against persons or groups on the basis of criteria that are generally believed to be inappropriate (e.g., gender, ethnicity, age, wealth, or religious belief).

Case: Both the physician and the family are trying to maximize the patient's good and avoid harm, but their contrasting definitions of benefit and harm lead to competing conclusions. The physician views the possibility of neurological improvement as a benefit and premature death as a harm. The family views comfort care as a benefit and the prolongation of suffering as a harm. The family shows respect for patient autonomy through their substituted judgment based on prior knowledge of the patient's values; the physician relies on a best-interests standard that carries a presumption of treatment in the absence of a clear expression by the patient to the contrary. Questions of justice might arise if treatment decisions discriminated against the patient on the basis of financial status, cognitive capacity, and so forth.

b. Rights. These are claims made against others (or society) to express ethical values we prize the most.³³ We invoke rights in medical practice (e.g., the right to informed consent) and in society (e.g., human rights). Rights demand a reciprocal response: if we say a patient has a right, it implies that health care providers have an obligation to respond to that right. There is a contrast between negative rights (the right to be left alone) and positive rights (the right to be assisted in some way) and between moral rights (common to all humans) and legal rights (variable among societies).

Case: Both the physician and family could frame their positions in terms of rights, the former emphasizing the patient's positive right to treatment and life, the latter emphasizing the patient's negative right to refuse treatment.

c. Consequences. Ethical reasoning based on consequences

the balance of its anticipated consequences, good and bad; this is the basis of utilitarianism.³⁴ Outcome variables relevant to clinical ethics include factors related to the patient (mortality, morbidity, suffering, disability, and cost) and interests related to patients' families, clinicians, hospitals, and other third parties. Because consequentialist reasoning is based on predicted outcomes, prognostic uncertainties will lessen the strength of its conclusions.

Case: Both the physician and family rely on possible outcomes, the former emphasizing the possibility of a net positive outcome through neurological improvement, the latter focusing on the possibility of a net negative outcome through prolonged suffering.

d. Comparable Cases. When referring to comparable cases, we reason by analogy.³⁵ This kind of case-based reasoning is routine in clinical medicine and reflects the physician's habit of comparing an unknown case to cases previously encountered. In ethics, we may be aware of paradigmatic cases—from our own clinical experience, professional literature, or important court cases (e.g., *Quinlan*, *Conroy*, *Cruzan*)—against which we compare a present case. Reasoning proceeds from the circumstances and conclusions of a clearer case to the circumstances of a less certain one: if the two cases are sufficiently alike to justify comparison, their similar circumstances may justify similar conclusions.

Case: The case of Claire Conroy (Supreme Court of New Jersey, 1985) is analogous, involving an 84-year-old woman with severe impairments whose nephew sought to have her nasogastric feeding tube removed. The court emphasized that patients retain the right to decline any medical treatment, including technological feeding, when they lose decision-making capacity.

e. Professional Guidelines. Although consensus is lacking on some issues, professional ethical guidelines serve as important references. Examples include the American Medical Association's Code of Ethics, the American College of Physicians' Ethics Manual, and the British Medical Association's Handbook of Ethics and Law.^{10,36,37}

Case: General guidelines about withholding life-sustaining treatments from incapacitated patients are available.

f. Conscientious Practice/Physician Integrity. Conscientious practice reminds us that physicians have their own ethical integrity that warrants respect.^{38,39} Patients, colleagues, or administrators should not be allowed to compromise a physician's integrity, which is both personal (the beliefs and values we bring to the practice of medicine) and professional (the beliefs and values the practice of medicine requires of us). Physicians may act according to conscience and decline participation in decisions that are considered unacceptable. Physicians who disengage from a patient's care should arrange a transfer of care in order to avoid the ethical and legal violation of patient abandonment.

Case: If the physician's recommendation to support the patient with PEG tube feeding represents a fundamental commitment to the patient's best interests, complying with the family's request to forgo life-supporting treatment may compromise the physician's integrity. Intractable disagreement between the physician and family might warrant transferring the patient's care to another physician or consideration of judicial

6. Confirm the Adequacy and Coherence of the Conclusion

In clinical medicine, the correctness of a diagnostic conclusion is tested by using the criteria of adequacy (the diagnosis accounts for all the patient's findings) and coherence (the patient's findings are consistent with the described pathophysiology of the hypothesized disease state). Clinical ethical reasoning may not be able to achieve this degree of confirmation, but a conclusion should be as adequate and coherent as possible. Failure to fulfill these criteria in clinical medicine forces the physician to question the diagnosis being entertained and consider a shift in clinical reasoning. Similarly, when clinical ethical reasoning produces conclusions that do not fit the known factors of a patient's case or are incoherent, additional ethical analysis or consultation is needed.

Case: The physician's insistence on nutritional support during a period of rehabilitation is ethically justified on the basis of the physician's assessment of benefits, harms, rights, possible outcomes, and conscientious practice. Even so, each of these sources of ethical value is open to more than one interpretation, as evidenced by the contrasting position of the family. The physician's assessment adequately engages the ethical issues at stake using values that form a coherent ethical picture. The physician's assessment does not "prove" that a position is right or "solve" a problem; rather, it justifies a course of action by articulating an adequate and coherent ethical explanation.

CONCLUSION

This approach to ethical reasoning incorporates existing knowledge in a systematic fashion through an organizational strategy that is familiar to clinicians. It is intended neither to replace basic curricula in ethics⁴⁰⁻⁴³ nor to deny the range of knowledge, skills, and attitudes that make education in clinical ethics complete.⁴⁴⁻⁴⁷ By capitalizing on the way clinicians think, we believe this approach provides a practical means to articulate ethical justifications for challenging clinical decisions. Such articulation allows the ethical basis of a difficult decision to become transparent.⁴⁸ Transparency, in turn, allows clinicians to communicate and document an explanation for a course of action, and it is likely to facilitate consensus based on a shared understanding of values and goals or, at least, clarify causes of lingering disagreements. A practical and systematic approach to clinical ethical reasoning thereby not only enhances the clarity and content of ethical decisions, but also facilitates dialogue and cooperation between the participants who will live with the decisions that are made.

Dr. Kaldjian is supported by funding from the Robert Wood Johnson Foundation as a Generalist Physician Faculty Scholar.

REFERENCES

1. **Jonsen AR, Siegler M, Winslade WJ.** Clinical Ethics. 4th ed. New York, NY: McGraw-Hill; 1998.
2. **Siegler M.** Decision-making strategy for clinical-ethical problems in medicine. *Arch Intern Med.* 1982;142:2178-9.
3. **Thomson DC.** Training in medical ethics: an ethical workup. *Forum Med.* 1978;1:33-6.
4. **Doukas DJ.** The design and use of the bioethics consultation form. *Theor Med.* 1994;309:184-8.
5. **Gillon R.** Medical ethics: four principles plus attention to scope. *BMJ.* 1994;309:184-8.
6. **McCullough LB.** Addressing ethical dilemmas: an ethics work-up. *New Physician.* 1984;33:34-5.
7. **Finnerty JJ, Pinkerton JV, Moreno J, Ferguson JE.** Ethical theory and principles: do they have any relevance to problems arising in everyday practice? *Am J Obstet Gynecol.* 2000;183:301-8.
8. **Lo B.** Resolving Ethical Dilemmas: A Guide for Clinicians. 2nd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2000:7-10.
9. **Miller FG, Fletcher JC, Fins JJ.** Clinical pragmatism: a case method of moral problem solving. In: Fletcher JC, Lombardo PA, Marshall MF, Miller FG, eds. *Introduction to Clinical Ethics.* 2nd ed. Frederick, MD: University Publishing Group; 1997:21-38.
10. **British Medical Association.** Ethics Today: The BMA's Handbook on Ethics and Law. 2nd ed. London: BMJ Publishing Group; 2004:6-12.
11. **Kelly SE, Marshall PA, Sanders LM, Raffin TA, Koenig BA.** Understanding the practice of ethics consultation: results of an ethnographic multi-site study. *J Clin Ethics.* 1997;8:136-49.
12. **DuVal G, Sartorius L, Clarridge B, Gensler G, Danis M.** What triggers requests for ethics consultations? *J Med Ethics.* 2001;27(suppl 1):i24-i29.
13. **Fetters MD, Brody H.** The epidemiology of bioethics. *J Clin Ethics.* 1999; 10:107-15.
14. **Brody BA.** Life and Death Decision Making. New York, NY: Oxford University Press; 1988:9-11.
15. **Beauchamp TL, Childress JF.** Principles of Biomedical Ethics. 5th ed. New York, NY: Oxford University Press; 2001.
16. **Pellegrino ED.** The metamorphosis of medical ethics: a 30-year retrospective. *JAMA.* 1993;269:1158-62.
17. **Nagel T.** The fragmentation of value. In: Engelhardt HT, Callahan D, eds. *Knowledge, Value and Belief.* Hastings-on-Hudson, NY: Institute of Society, Ethics and the Life Sciences; 1977:279-94.
18. **Tulsky JA, Chesney MA, Lo B.** How do medical residents discuss resuscitation with patients? *J Gen Intern Med.* 1995;10:436-42.
19. **Tulsky JA, Fischer GS, Rose MR, Arnold RM.** Opening the black box: how do physicians communicate about advance directives? *Ann Intern Med.* 1998;129:441-9.
20. **von Gunten CF, Ferris FD, Emanuel LL.** Ensuring competency in end-of-life care: communication and relational skills. *JAMA.* 2000;284: 3051-7.
21. **Goold SD, Williams B, Arnold RM.** Conflicts regarding decisions to limit treatment: a differential diagnosis. *JAMA.* 2000;283:909-14.
22. **Pellegrino ED.** The internal morality of clinical medicine: a paradigm for the ethics of the helping and healing professions. *J Med Philos.* 2001; 26:559-79.
23. **Siegler M, Pellegrino ED, Singer PA.** Clinical medical ethics. *J Clin Ethics.* 1990;1:5-9.
24. **Forrow L, Arnold RM, Frader J.** Teaching clinical ethics in the residency years: preparing competent professionals. *J Med Philos.* 1991;16: 93-112.
25. **Jones AH.** Literature and medicine: narrative ethics. *Lancet.* 1997;349: 1243-6.
26. **Charon R.** Narrative medicine: a model for empathy, reflection, profession, and trust. *JAMA.* 2001;286:1897-902.
27. **DuBose ER, Hamel R, O'Connell LJ, eds.** A Matter of Principles? Ferment in U.S. Bioethics. Valley Forge, PA: Trinity Press International; 1994.
28. **Callahan D.** Ethics without abstraction: squaring the circle. *J Med Ethics.* 1996;22:69-71.
29. **Weir RF.** Abating Treatment with Critically Ill Patients: Ethical and Legal Limits to the Medical Prolongation of Life. New York, NY: Oxford University Press; 1989:349-54.
30. **Farley MA.** Compassionate Respect: A Feminist Approach to Medical Ethics and Other Questions. New York, NY: Paulist Press; 2002.
31. **Schneider CE.** The practice of autonomy and the practice of bioethics. *J Clin Ethics.* 2002;13:72-7.
32. **Outka G.** Social justice and equal access to health care. *J Rel Ethics.* 1974; 2:11-32.
33. **Freedman M.** Rights. Minneapolis: University of Minnesota Press; 1991.
34. **Smart JJC, Williams B.** Utilitarianism: For and Against. Cambridge, England: Cambridge University Press; 1982.
35. **Jonsen AR, Toulmin S.** The Abuse of Casuistry: A History of Moral Reasoning. Berkeley: University of California Press; 1988.
36. **AMA Council on Ethical and Judicial Affairs.** Code of Medical Ethics;

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.