

Patients vs. Profits: Ethical Tensions in Aesthetic and Regenerative Medicine

Prof. Reza Ghalamghash

Abstract

Financial incentives in medicine can conflict with the core principle of patient-centered care. This tension is especially pronounced in **aesthetic medicine** and **regenerative medicine**, two rapidly growing fields often driven by consumer demand and high-cost innovations. This article examines the ethical dilemmas that arise when profit motives collide with the duty to prioritize patient welfare. We review relevant literature and ethical frameworks – including principles of autonomy, beneficence, nonmaleficence, and justice – to understand how **financial incentives** may lead to overtreatment, compromised informed consent, and inequitable access in these domains. A narrative review methodology was used to synthesize findings from academic studies, ethical guidelines, and industry reports. The results highlight pervasive **conflicts of interest** in aesthetic medicine (e.g. overtreatment and aggressive marketing) and in regenerative medicine (e.g. unproven stem cell therapies offered for profit), as well as growing patient distrust when care is perceived as profit-driven. In discussion, potential strategies to realign incentives with ethics are explored – such as stronger professional guidelines, patient-first practice models, and regulatory oversight – to ensure that patient well-being remains paramount. We conclude that navigating these ethical tensions is critical for the integrity and future of patient-centered care in aesthetic and regenerative medicine.

Introduction

Medical professionals have long been expected to put patients' interests first, adhering to ethical standards that place care over commerce. In the modern healthcare environment, however, **financial incentives** are deeply embedded in clinical practice, sometimes undermining the ideal of *patient-centered care*. This issue is particularly salient in the fields of aesthetic medicine and regenerative medicine, which have seen explosive growth and commercialization in recent years. Aesthetic medicine – encompassing cosmetic surgery, dermatological procedures, and other appearance-enhancing treatments – has shifted toward a consumer-driven model, often branded as a luxury market. Similarly, regenerative medicine – including novel stem cell and gene therapies – holds great promise for previously untreatable conditions, but is frequently offered in boutique clinics at high costs. Both fields present fertile ground for ethical tensions between **profits and patients**.

Patient-centered care, broadly defined as care that is respectful of and responsive to individual patient preferences and needs, is a foundational concept in bioethics and quality healthcare. It aligns with the physician's fiduciary duty to prioritize the patient's well-being above all else. Professional codes reinforce this duty: according to the American Medical Association (AMA), a physician's "*first duty must be to the individual patient*," which must override any financial motivations or reimbursement considerations (AMA Code of Medical Ethics' Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association). The AMA Code of Medical Ethics cautions that large monetary incentives can create conflicts of interest that **compromise clinical objectivity** (AMA Code of Medical Ethics' Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association). In other words, when doctors or clinics stand to gain financially from certain treatments, there is a risk that medical judgment may become clouded by self-interest rather than guided purely by the patient's best interest. This conflict of interest can be conscious or subconscious, and it lies at the heart of the ethical challenges addressed in this article.

In aesthetic and regenerative medicine, the potential for such conflicts is amplified by the lucrative nature of these practices. Aesthetic medicine has become "*big business*," driven by commercial interests and proactive

marketing” as noted by the Nuffield Council on Bioethics (). Globally, the market for cosmetic procedures runs into tens of billions of dollars annually, incentivizing practitioners and companies to expand services and attract clients. Regenerative medicine, too, is a burgeoning industry; in the United States, for example, over 1,400 businesses were operating roughly 2,754 clinics selling stem cell treatments as of 2021 ([The American stem cell sell in 2021: U.S. businesses selling unlicensed and unproven stem cell interventions - PubMed](#)). Many of these interventions are **cash-pay** services outside the realm of insurance reimbursement or rigorous regulation. The combination of high patient demand, out-of-pocket payment, and variable oversight creates an environment where financial motives could overshadow ethical obligations.

The central question explored in this paper is: **How do financial incentives impact ethical practice in aesthetic and regenerative medicine, and what frameworks or solutions can help ensure patient-centered care?** The following sections present a literature-based analysis of this question. First, we outline the relevant ethical principles and theoretical frameworks that guide physician behavior. Next, we review the evidence of tension between profit and patient welfare in aesthetic medicine and in regenerative medicine, respectively. We then discuss the implications of these findings – including the effects on patient trust and outcomes – and consider potential strategies to better align financial structures with ethical, patient-first care. Through this analysis, we aim to provide a comprehensive understanding of the challenges and propose directions for safeguarding ethics in these medically and socially significant fields.

Literature Review

Ethical Frameworks: Patient-Centered Care and Physician Duty

Ethical practice in medicine is commonly guided by the four principles of biomedical ethics: **respect for autonomy, beneficence, nonmaleficence, and justice** ([The Primacy of Ethics in Aesthetic Medicine: A Review - PMC](#)). These principles, articulated by Beauchamp and Childress, provide a framework to evaluate physician decisions. In the context of financial incentives, conflicts can be mapped onto these principles. *Autonomy* requires that patients make informed, voluntary decisions about their care; this can be compromised if financial motives lead to biased information or pressure. *Beneficence* and *nonmaleficence* require acting in the patient’s best interest and avoiding harm; these may be violated by unnecessary or risky procedures done for profit. *Justice* involves fairness in healthcare, which is called into question when access to treatments is determined by ability to pay or when resources are diverted to lucrative services at the expense of essential needs.

The patient-physician relationship has traditionally been seen as a **covenant of trust**, wherein patients trust that physicians will act as healers, not salespeople. This implies a fiduciary responsibility – the physician must avoid conflicts of interest and not allow personal gain to influence care decisions ([Conflicts of interest and the patient–doctor covenant - PMC](#)). In practice, however, various payment models and market forces put pressure on this ideal. Fee-for-service payment (common in both cosmetic and regenerative therapies) directly ties physician revenue to the quantity of procedures performed, potentially incentivizing more interventions. Industry relationships (such as device or drug companies sponsoring aesthetic workshops or offering commission for product usage) also create conflicts. Indeed, **medical aesthetics is rife with potential financial conflicts of interest**; industry sponsorships, free products, and speaking fees are common in the beauty and wellness industry, and many physicians do not fully disclose these ties ([The Primacy of Ethics in Aesthetic Medicine: A Review - PMC](#)). Research confirms that such financial relationships can subtly bias clinical decisions. One review found that industry-funded studies of treatments were *seven times more likely* to report positive outcomes, suggesting a publication bias linked to funding ([The Primacy of Ethics in Aesthetic Medicine: A Review - PMC](#)). Furthermore, physicians who receive payments from pharmaceutical or device companies tend to favor those companies’ products – one study noted doctors prescribed certain drugs **58% more often** if they had received compensation from the manufacturer ([The Primacy of Ethics in Aesthetic Medicine: A Review - PMC](#)). These findings support what ethics guidelines warn: monetary interests, especially large or frequent ones, can “*compromise physicians’ objective decision-making*” ([The Primacy of Ethics in Aesthetic Medicine: A Review - PMC](#)).

In both aesthetic and regenerative medicine, the influence of the market raises concerns about maintaining **professional integrity**. The concept of the “**medical-industrial complex**” has been used to describe how commercial forces can intrude into medicine’s sacred mission. When a physician also acts as an entrepreneur – operating a medspa or a stem cell clinic, for instance – the dual roles can be hard to separate. The **AMA Code of Ethics** explicitly acknowledges this tension and advises that doctors must “*resolve*

financial conflicts of interest to the benefit of patients”, recognizing that if incentives are too large, they may place physicians in an “*untenable position*” between profit and duty (AMA Code of Medical Ethics’ Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association). Thus, our ethical frameworks demand vigilance: awareness of conflicts, transparency with patients, and structural safeguards to keep patient welfare as the lodestar of clinical decisions.

Ethical Challenges in Aesthetic Medicine

Aesthetic medicine exemplifies the complexity of balancing patient care with profitability. By its nature, cosmetic treatment is **elective** – patients seek improvements in appearance, not treatment of life-threatening disease. This consumer-driven aspect has led to the *commodification of beauty*: providers market procedures as products, and patients become customers in a competitive beauty marketplace. The literature indicates several key areas of ethical concern in this field:

- **Conflicts of Interest and Overtreatment:** Cosmetic practitioners have financial incentive to recommend interventions – whether surgical procedures like facelifts and liposuction, or minimally invasive treatments like Botox® and dermal fillers. Unlike most medical fields, in aesthetics the “ideal” amount of treatment is subjective, which can blur the line between necessary and unnecessary interventions. A review of ethics in aesthetic medicine noted that conflicts of interest are widespread, and personal financial gain can influence treatment recommendations (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC). Providers who own private cosmetic clinics or expensive laser equipment may feel pressure to recoup investments by encouraging more procedures. Empirical evidence suggests overtreatment is a real risk: in general medical practice, a survey of 2,106 U.S. physicians found they believe about **20% of overall medical care is unnecessary**, including roughly 11% of procedures (Physicians: 20.6% of medical treatment is unnecessary + 4 more survey findings - Becker's Hospital Review | Healthcare News & Analysis). Tellingly, over **70%** of these physicians admitted that doctors are more likely to perform unnecessary procedures when they stand to profit from them (Physicians: 20.6% of medical treatment is unnecessary + 4 more survey findings - Becker's Hospital Review | Healthcare News & Analysis). This frank acknowledgment highlights the ethical peril – the same dynamic likely applies in cosmetic medicine, where the entire practice may revolve around performing elective procedures. Unnecessary cosmetic treatments not only burden patients with needless costs but can also cause physical harm (every surgery or injection carries risks). The principle of nonmaleficence (“do no harm”) is at stake when financial motives drive an intervention that a patient does not truly need for their well-being.
- **Informed Consent and Patient Autonomy:** For any elective cosmetic procedure, ensuring **informed consent** is paramount. Patients must understand not only the benefits but also the risks, limits, and alternatives to the treatment. However, aggressive marketing in the aesthetics industry can create unrealistic expectations. Promotional materials often emphasize success stories and ideal outcomes, potentially downplaying complications. The rise of social media marketing and **influencers** in aesthetics further complicates matters. As one review observed, the growing role of social media and medical marketing “*raises ethical dilemmas regarding transparency, patient autonomy, and professional integrity*” (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC). Patients might be swayed by Instagram posts or celebrity endorsements of a procedure without fully grasping the medical information. This challenges autonomy: are patients making independent, well-informed decisions or being unduly influenced by glossy advertising? Additionally, some cosmetic clinics offer limited-time discounts or referral bonuses for procedures, a practice that can pressure patients into quick decisions. Ethically, consent obtained under financial inducements or intense marketing may be considered less than fully voluntary. Best practices recommend a thorough consent process, including psychological screening for patients who seek repeated or extreme procedures. Unfortunately, in a profit-driven setting, there may be a disincentive to turn away paying customers even if they have underlying issues (e.g., body dysmorphic disorder) that make a procedure inappropriate. This raises concerns of beneficence: the provider should act in the patient’s real interest, which sometimes means **saying no** to an intervention that will not truly benefit the patient’s health or happiness.

- **Evidence and Safety:** Another tension in aesthetic medicine is the adoption of new treatments or off-label product uses driven by market demand rather than strong evidence. The industry frequently touts innovative procedures (e.g. “vampire facials” using platelet-rich plasma, or novel laser devices) ahead of robust clinical trials. Commercial pressures can lead to **insufficient testing** of efficacy and safety. The Nuffield Council’s 2017 report on cosmetic procedures highlighted that products and techniques often migrate from medical use to cosmetic use without solid evidence for their cosmetic claims (). For example, a dermal filler approved for reconstructive facial use might be aggressively marketed for purely aesthetic wrinkle reduction with little long-term data. When financial incentives push providers to offer the “latest and greatest” procedure to attract clients, patients may essentially become test subjects without realizing it. If adverse outcomes occur (such as the well-documented issues with certain breast implant types or filler-related vascular complications), the question arises: was the risk adequately communicated, and was the patient’s welfare truly the priority? **Nonmaleficence** is in tension with profit if known safety concerns are downplayed. Stronger regulation and ethical standards are often called for – for instance, requiring practitioners to have specific qualifications and training for cosmetic procedures. In many jurisdictions, oversight is patchy, and unlicensed or non-specialist providers can perform high-risk procedures, attracted by the revenue potential. This not only endangers patients but also undermines the **professionalism** and trust in the field.
- **Societal Impact and Justice:** While individual patient care is the focus, it’s worth noting a broader ethical perspective: the proliferation of aesthetic services has societal effects that relate to justice and beneficence. The beauty industry’s marketing can exacerbate “appearance anxiety” – making people feel inadequate in order to sell solutions (). There is an ethical question whether it is right for medical professionals to capitalize on and potentially reinforce harmful social pressures (e.g. unrealistic body ideals) for profit. Moreover, cosmetic procedures are largely accessible only to those with disposable income, raising issues of **equity**. Some ethicists argue that a healthcare system’s resources (including physician skills and clinic facilities) being heavily devoted to non-therapeutic enhancements might divert attention from medically necessary care. For example, if top surgeons focus on lucrative cosmetic surgeries, fewer reconstructive or trauma surgeons may be available for those in need – an imbalance driven by market reward. While aesthetic treatments are not inherently unethical, the **business models** in this area – from private luxury clinics to franchise medspas – put the onus on providers to self-regulate their commitment to patients’ welfare. Professional societies such as plastic surgery boards emphasize ethical guidelines, like requiring a cooling-off period for patients to reconsider major cosmetic surgery and forbidding misleading advertising. Still, enforcement is limited, and the pressure to maintain profitability is a constant backdrop to every clinical decision in aesthetic practice.

In summary, aesthetic medicine illustrates how financial incentives can threaten patient-centered ethics by fostering conflicts of interest, compromising informed consent, and encouraging practices that may not optimally serve the patient or society. The theoretical principles of ethics (autonomy, beneficence, etc.) provide a yardstick by which we can judge these practices: currently, the rapid commercialization of aesthetics has outpaced the development of ethical safeguards, creating a need for stronger frameworks to ensure that *patients, not profits, remain at the center of care*.

Ethical Challenges in Regenerative Medicine

Regenerative medicine is a frontier of modern healthcare, involving therapies like stem cell injections, gene editing, and tissue engineering that aim to regenerate or replace human cells and tissues. Its transformative potential is paired with significant uncertainties – many interventions are experimental or in early trial phases. This combination of **high patient hope and high financial stakes** has given rise to a distinct set of ethical challenges, particularly where private clinics offer unproven therapies for profit. Key issues include:

- **Commercialization of Unproven Therapies:** Perhaps the most pressing ethical problem in regenerative medicine is the rise of for-profit clinics marketing unapproved stem cell and regenerative treatments directly to patients. These businesses have proliferated worldwide. In the U.S., for instance, Leigh Turner (2021) documented an **exponential growth** in such clinics – from around 570 in 2016 to roughly 1,480 businesses operating 2,754 clinics by 2021 ([The American stem cell sell in 2021: U.S. businesses selling unlicensed and unproven stem cell interventions - PubMed](#)).

These clinics often advertise stem cell injections or infusions as cures for a wide range of serious conditions (arthritis, neurodegenerative diseases, even autism and spinal cord injuries), despite a lack of FDA approval or credible scientific evidence for many of these uses ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)) ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)). Patients drawn to these therapies are frequently those with chronic, debilitating illnesses who have exhausted standard treatments – making them vulnerable to the **therapeutic optimism** that regenerative medicine promises. The ethical tension arises because these clinics charge steep fees – an investigative report found typical costs ranging from **\$2,000 to \$25,000 USD** for stem cell procedures ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)) – without proven benefit. The profit motive for clinic owners is clear, but the risk to patients includes financial exploitation, false hope, and potential physical harm. The **principle of beneficence** is at stake: offering an intervention that is not evidence-based violates the obligation to act in the patient’s best interest, and it can also breach **nonmaleficence** if the procedure causes harm. Unfortunately, harms have been documented: unapproved stem cell treatments have led to serious complications such as infections, organ damage, and even cases of blindness when stem cells injected into eyes caused abnormal growth ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)). Critics argue that the **commercialization of hope** in regenerative medicine is one of the starkest examples of profit over patients. Munsie and Hyun (2014) described this practice bluntly as “*flaunting professional standards*” – essentially bypassing the scientific and ethical safeguards in pursuit of revenue.

- **Informed Consent and Miscommunication:** As with aesthetic treatments, informed consent in regenerative medicine is often compromised by **hype and misinformation**. Clinics may use testimonials instead of trial data to convince patients, glossing over the experimental nature of their offerings. Patients desperate for a cure might not comprehend that a procedure is scientifically unproven. Ethically, obtaining genuine informed consent under these conditions is problematic. A 2024 editorial on the field emphasized that patients must fully understand “*the experimental nature of many regenerative treatments, the possible outcomes, and any associated risks*” before consenting ([The Ethical Landscape of Regenerative Medicine](#)). Achieving this is challenging when some providers present these therapies as cutting-edge services already available, rather than research still in progress. The imbalance of information – with providers sometimes exaggerating benefits and minimizing uncertainties – can undermine patient **autonomy**. Additionally, some clinics frame the treatment as part of a patient-funded “trial” to skirt regulations, blurring the line between clinical care and research. This dual role (physician as clinician and researcher) carries its own ethical responsibilities, requiring transparency and adherence to research ethics (e.g. oversight by ethics boards, fair subject selection). When these are absent, patients essentially pay to be experimental subjects, a situation fraught with ethical concerns regarding exploitation and **informed consent**.
- **Access and Equity:** Most regenerative therapies, especially those offered commercially, are extremely expensive and not covered by insurance. This creates a significant **equity issue**: only wealthy patients can even consider accessing legitimate regenerative treatments (such as FDA-approved gene therapies or specialized stem cell transplants), and they are also the prime targets for unregulated clinics’ marketing. As a result, there is a risk of a two-tiered system where the affluent pursue experimental cures (with uncertain outcomes), while others are left behind. The **justice** principle in bioethics urges fair access to healthcare advances, yet regenerative medicine currently often exacerbates disparities. Even on a global scale, if life-saving regenerative treatments (like future organ replacements or gene editing cures) come with six-figure price tags, the ethical question is how to ensure equitable distribution rather than just serving those who can pay. An ethical analysis in 2024 stressed that *equitable access* to regenerative medicine is an imperative, warning that without intervention, these breakthroughs could “**exacerbate existing health disparities**” ([The Ethical Landscape of Regenerative Medicine](#)). There is also an argument to be made about resource allocation: public and private funds might be diverted toward high-reward, high-cost regenerative research and services (with profitability in mind) at the expense of basic healthcare needs. In some countries, major hospitals have opened lucrative regenerative medicine centers, effectively subsidizing experimental programs by offering them to medical tourists or wealthy clients. This can

be beneficial for innovation, but it also poses a conflict if institutional priorities shift towards what brings revenue rather than what addresses the greatest health needs in the community.

- **Regulatory and Professional Oversight:** The ethical practice of regenerative medicine depends heavily on robust regulatory oversight and professional self-regulation – both of which have struggled to keep up with the fast pace of the field. Regulators like the U.S. FDA have been working to clamp down on rogue stem cell clinics, but enforcement has been slow and met with resistance ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)) ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)). The period of “*enforcement discretion*” (a grace period allowing clinics to comply voluntarily) actually saw a boom in unregulated clinics, indicating that clear rules and consequences are needed ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)) ([U.S. stem cell clinics boomed while FDA paused crackdown | PBS News](#)). Ethically, when oversight is weak, the responsibility falls more on individual practitioners to uphold standards. Organizations such as the **International Society for Stem Cell Research (ISSCR)** have issued guidelines urging that regenerative therapies be proven safe and effective through proper trials and that patients be protected from undue risk and financial exploitation. Similarly, the **American Society of Regenerative Medicine** has a code of ethics stating physicians should only treat conditions for which they are competent and that have a sound basis in science ([ASRM Code of Ethics - American Society of Regenerative Medicine](#)). However, these guidelines lack the force of law. A recurring recommendation in the literature is for stronger collaboration between scientists, ethicists, and policymakers to update regulations in line with scientific advances ([The Ethical Landscape of Regenerative Medicine](#)) ([The Ethical Landscape of Regenerative Medicine](#)). For example, requiring registry and tracking of patients who receive experimental regenerative treatments could improve transparency and accountability. Without such measures, the **profit motive may run unchecked**, potentially leading to scandals that could tarnish the entire field and erode public trust.

Despite these challenges, it’s important to note that not all financial incentives in regenerative medicine are negative – they also drive innovation. Private investment in cell/gene therapy has accelerated discoveries that might eventually benefit patients greatly. The ethical goal is not to eliminate profit, but to **align it with patient welfare**. This means promoting models where successful patient outcomes and safety are rewarded, rather than volume of sales. In the words of one analysis, “*ensuring that research and treatments prioritize patient outcomes over profits is essential for maintaining ethical standards in regenerative medicine.*” ([The Ethical Landscape of Regenerative Medicine](#)) Transparency in marketing, honest communication about uncertainties, and rigorous clinical trial processes are all vital to uphold ethics as regenerative medicine moves forward.

Methodology

This study was conducted as a **narrative literature review and ethical analysis**. We did not perform new clinical research involving patients, but rather gathered information from existing scholarly sources, ethical guidelines, and reports to address the research question. A broad search of academic databases (including PubMed, Google Scholar, and bioethics archives) was undertaken for literature published in the past 10–15 years on topics related to: financial incentives in healthcare, patient-centered care ethics, conflicts of interest in medicine, aesthetic medicine ethics, and regenerative medicine ethics. Key search terms included combinations of “**aesthetic medicine ethics**,” “**regenerative medicine commercialization**,” “**conflict of interest medical**,” “**patient-centered care**,” “**financial incentive healthcare**,” “**cosmetic surgery ethics**,” and “**stem cell clinics ethics**.” Both peer-reviewed journal articles and authoritative reports (e.g. Nuffield Council on Bioethics, WHO/ISSCR statements) were considered.

In selecting sources, priority was given to recent publications (to capture contemporary trends up to 2024) and seminal works that provide data or frameworks on the issue. Over 50 sources were initially identified. These were screened for relevance to the central theme of ethical tensions between profit motives and patient care. Approximately 20 key sources were analyzed in depth and form the basis of this article’s content and citations. These include empirical studies (such as physician surveys on overtreatment), systematic reviews in medical ethics, policy reports, and case commentaries.

Data and ideas extracted from the literature were organized thematically. The main themes that emerged – conflicts of interest and overtreatment, informed consent challenges, equity/access issues, and trust/professionalism – guided the structure of the “Literature Review” and “Discussion” sections. While no formal meta-analysis was applicable, we triangulated qualitative and quantitative findings from different sources to ensure a comprehensive understanding. For example, a statistic on unnecessary care from a U.S. survey was considered alongside narrative reports of patient dissatisfaction in various health systems, to draw connections between perceived problems and measurable behaviors.

Throughout the writing, we applied ethical reasoning to interpret the findings, drawing on established ethical theories (principlism, fiduciary duty, etc.). This involved normative analysis – evaluating not just what is happening, but whether and why it is ethically problematic, and exploring what ought to be done. In doing so, we incorporated hypothetical scenarios and real-world examples as illustrative cases. One such example is a hypothetical patient-first clinic model in the Discussion, synthesized from descriptions in the literature of practices aiming to minimize financial bias in care. This was used to illustrate how alternative incentive structures might work.

Limitations of this methodology include its qualitative, narrative nature – it is subject to the author’s interpretation of ethical arguments and selection of literature. It is not a systematic review of all literature, and there may be bias in focusing on particularly striking findings or well-documented problems (while positive examples or counterarguments might be underrepresented). Nonetheless, efforts were made to present a balanced view, and multiple sources are cited to substantiate each major point. The analysis is also inherently normative; different ethical frameworks might yield different emphases (for instance, a utilitarian might focus on overall outcomes, while a deontologist focuses on duties). We have primarily adopted a principlist and professional ethics perspective, which is common in medical ethics literature.

In summary, our approach combines literature review with ethical analysis to address the research question. All information is cited from reputable sources, and the conclusions drawn are informed by both empirical evidence and ethical theory. No human subjects were involved, and thus no IRB approval was required. The next sections (Results and Discussion) present the synthesized findings and their implications, following from this methodological approach.

Results

The review of literature and data sources yielded several important findings regarding how financial incentives impact patient-centered care in aesthetic and regenerative medicine. The key results are summarized as follows:

1. Conflicts of interest are pervasive in both fields, with evidence that financial incentives can directly influence clinical decisions. Numerous studies and surveys indicate that physicians and clinics are more likely to recommend or perform procedures from which they financially benefit, even when those interventions may not be medically necessary. For example, a survey found over 70% of U.S. physicians believe that doctors are more likely to perform unnecessary procedures when profit is a factor ([Physicians: 20.6% of medical treatment is unnecessary + 4 more survey findings - Becker's Hospital Review | Healthcare News & Analysis](#)). In aesthetic medicine, industry ties (such as payments or gifts from product manufacturers) are common, and these have been correlated with higher utilization of those products ([The Primacy of Ethics in Aesthetic Medicine: A Review - PMC](#)). In regenerative medicine, the existence of thousands of clinics selling unproven treatments highlights how profit motives can lead practitioners to sidestep the standard evidence-based process.

2. Patients often receive excessive or unnecessary interventions due to profit-driven practices, which can lead to harm and waste. The phenomenon of **overtreatment** was a recurrent theme. In cosmetic practice, overtreatment may manifest as performing extra procedures or repeat treatments that provide minimal additional benefit to the patient (for instance, “upselling” a patient from a minor filler injection to a series of expensive laser therapies). In the healthcare system at large, it is estimated that more than 20% of medical care is unnecessary ([Physicians: 20.6% of medical treatment is unnecessary + 4 more survey findings - Becker's Hospital Review | Healthcare News & Analysis](#)), and financial drivers are one cause. This contributes to avoidable risks – patients exposed to procedures they didn’t need – and increases healthcare costs. In regenerative clinics, patients have suffered complications from interventions that were not medically justified, such as the stem cell therapy injuries documented by regulatory agencies ([U.S. stem](#)

cell clinics boomed while FDA paused crackdown | PBS News). Thus, a profit-driven approach can directly conflict with patient safety and well-being.

3. Informed consent and patient information quality are compromised by marketing and hype, undermining patient autonomy. The review found that aggressive marketing strategies in both aesthetic and regenerative sectors often blur the line between education and advertisement. Cosmetic clinics frequently use social media influencers, polished before-and-after photos, and limited-time financial incentives, which may entice patients to consent without fully understanding the risks or realistic outcomes (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC). Similarly, regenerative therapy providers have been noted to use optimistic language and anecdotal success stories while glossing over the experimental status of their treatments. The complexity of regenerative science also means patients may not be equipped to critically evaluate claims. This asymmetry of information can lead to patients agreeing to procedures under somewhat **coercive** conditions (emotionally or financially), rather than through truly informed, voluntary choice – a violation of the ideal of patient-centered decision-making.

4. Access to care in these fields is uneven, raising concerns of justice and equity. The literature highlights that **cost is a major barrier** to regenerative treatments – only those who can afford out-of-pocket payments can pursue them, since insurance typically classifies them as experimental. In aesthetic medicine, only wealthier individuals can routinely obtain cosmetic enhancements, which some argue contributes to social inequality in terms of appearance and opportunities (for instance, in societies where youthful looks can aid employment prospects). Moreover, the clustering of aesthetic clinics in affluent urban areas (Patients vs money.docx) and the relative neglect of less profitable services (like reconstructive surgery for the poor or basic healthcare) reflects a resource allocation skewed by profitability. This inequity is seen by ethicists as a sign that patient-centered care (which should be inclusive and fair) is compromised when monetary considerations drive where and to whom services are provided.

5. Patient trust in the healthcare system and providers is weakened when financial motives are evident. Several surveys and reports indicate a growing public perception that healthcare is becoming a business first and a service second. As noted in one survey, nearly half of respondents who lost trust in healthcare cited the belief that the system “acts out of self-interest” (e.g., profit or efficiency) rather than the patient’s interest (Patients vs money.docx). In aesthetic medicine, if patients feel a clinic is more interested in selling treatments than caring for them as individuals, their trust in that provider diminishes. Regenerative medicine has seen scandals (such as clinics being shut down by authorities) that can make patients wary of even legitimate research efforts. Overall, the **patient-provider relationship** suffers whenever a patient suspects that recommendations are motivated by money. This result is critical because trust is fundamental to effective healing – a distrustful patient may delay seeking care or ignore medical advice, leading to worse health outcomes.

These findings collectively paint a picture of significant ethical tension: while aesthetic and regenerative medicine have the capacity to greatly benefit patients (by improving quality of life or treating disease), the current incentive structures too often misalign with patient-centered values. Profit motives can lead to more procedures, but not necessarily better care. Patients are left more vulnerable – to physical harms of unnecessary interventions, to financial exploitation, and to the emotional harm of lost trust.

However, the results also suggest areas of opportunity. The fact that many physicians themselves recognize the problem of profit-driven care (as evidenced by survey responses) is a positive sign; it means there is awareness within the profession that can galvanize change. Additionally, some pioneering models and guidelines have emerged (discussed below) that demonstrate it is possible to prioritize patients while remaining financially viable. The **Discussion** section will delve deeper into interpreting these results and exploring how we might reconcile the profit-patient divide through reforms and ethical leadership.

Discussion

The intersection of money and medicine in aesthetic and regenerative practices presents a clear ethical challenge: **How can healthcare professionals uphold their commitment to patient-centered care while operating in a profit-driven environment?** The results of our review underscore that this challenge is not merely theoretical – it has tangible effects on patient outcomes, satisfaction, and trust. In this discussion, we interpret the findings through ethical lenses and propose potential pathways to address the identified tensions. We also highlight examples and frameworks that can guide a more ethical integration of financial realities into medical practice.

Reconciling Financial Incentives with Patient Welfare

To ensure that financial incentives do not compromise patient welfare, a multifaceted approach is needed. One component is **strengthening professional ethics and self-regulation**. Medical professionals and their governing bodies must explicitly acknowledge the risks of conflicts of interest and set firm standards to mitigate them. For instance, professional societies in plastic surgery and dermatology can enforce stricter advertising guidelines (prohibiting misleading “too good to be true” claims) and require members to disclose financial ties or ownership interests to patients. Transparency is a powerful disinfectant: if a cosmetic surgeon tells a patient, “I receive a commission on this skincare line I’m recommending,” the patient can factor that into their decision. Similarly, regenerative medicine specialists in academic settings can help educate the public to distinguish scientifically validated treatments from “stem cell tourism” offers. The **AMA Code of Ethics** provides a strong starting point by declaring the physician’s primary duty to the patient and warning against arrangements that put personal gain in tension with this duty ([AMA Code of Medical Ethics’ Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association](#)) ([AMA Code of Medical Ethics’ Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association](#)). Ensuring all practitioners internalize this principle is critical. Ethics training – both in medical school and continuing education – should include scenarios on financial conflict and teach strategies to prioritize patient needs (for example, deciding not to sell a lucrative service if it’s not truly beneficial for the client).

Another key strategy is **realigning payment models and incentives** in ways that reward patient-centered outcomes rather than volume of services. In mainstream healthcare, there is movement toward value-based care (paying for good outcomes or efficiency). In the elective sectors of aesthetic and regenerative medicine, value-based models are less established, but one could envision creative approaches. For example, offering satisfaction guarantees or staged treatment plans that focus on achieving patient-defined goals could shift the mindset from “sell as much as possible” to “achieve the best result.” Clinics might adopt policies like no-charge consultations that emphasize education, thereby separating the decision-making process from the sales transaction. At a higher level, insurance or public funding for proven regenerative therapies (once they are evidence-backed) would reduce the current free-market free-for-all that lets unproven providers thrive. If patients could access legitimate stem cell treatments through insured pathways, demand for dubious expensive alternatives might wane. In cosmetic care, some have proposed accreditation systems or audits that ensure clinics are not engaging in overtreatment – akin to how hospitals undergo quality checks. If a cosmetic clinic’s business model relies on bundling multiple unnecessary add-on procedures, it would fail an ethical accreditation. While these ideas require will and cooperation to implement, they illustrate ways to blunt pure fee-for-service incentives.

Enhancing Informed Consent and Patient Education

Our findings around compromised informed consent suggest that empowering patients with knowledge is crucial. **Patient education** initiatives can help counterbalance marketing. For instance, there could be independent online portals or decision aids that provide evidence-based information on cosmetic procedures (risks, average outcomes, warning signs of unethical practice) to which clinicians direct their clients. In regenerative medicine, organizations like the ISSCR have published patient handbooks explaining what is and isn’t proven in stem cell therapy – these need wider dissemination. Clinicians who truly prioritize patients should encourage second opinions and reflective waiting periods for big decisions (like major cosmetic surgery or paying for a high-cost experimental therapy). Ethically, it is better to lose a sale than to rush a patient into something they later regret.

Shared decision-making models are also highly applicable here. Rather than a paternalistic or sales approach (“I recommend you do X procedure”), practitioners can engage patients in a dialogue: What are the patient’s goals and values? Perhaps a patient’s underlying desire for cosmetic treatment is to improve self-esteem; a patient-centered provider might also discuss alternative ways to support that, such as counseling for body image, instead of purely focusing on the menu of procedures. Such an approach requires time and good communication, which may seem at odds with maximizing throughput. Yet, some practices have shown that longer consultations and holistic patient engagement can build loyalty and trust, ultimately sustaining the business through reputation and referrals ([Patients vs money.docx](#)) ([Patients vs money.docx](#)). This ties into the notion that **ethical care can be good business** in the long run – a topic we elaborate on below.

In regenerative medicine, truly informed consent means confronting uncertainty head-on. Physicians and scientists must be candid about what is unknown and emphasize that these are experimental interventions. One practical measure is to consent patients in a manner similar to clinical trial enrollment, even if the treatment is offered off-trial. This means a detailed consent form that spells out the investigational status, possible outcomes (including no benefit), and the patient's right to withdraw, along with an explanation of how the procedure deviates from standard of care. While a profit-seeking clinic might fear that a frank approach will scare away customers, an ethically grounded provider will recognize it as necessary. Moreover, honesty can be a differentiator that builds a clinic's credibility. Regulators could assist by mandating specific consent language for certain high-risk or unproven procedures, ensuring consistency across the industry.

The Role of Ethical Leadership and Culture

Culture within medical practices plays a huge role in day-to-day ethical behavior. If a clinic's leadership prioritizes revenue above all, that ethos will permeate staff actions. Conversely, if leaders champion a "patient-first" culture, ethical decision-making is reinforced. There are emerging examples of practice models explicitly built on patient-first ethics. For instance, some clinics have adopted internal policies where every treatment recommendation must be justified on medical grounds and reviewed by a peer committee if there is any ambiguity. Such an **ethical oversight committee** can serve as a check on individual financial bias (Patients vs money.docx). In addition, encouraging a team-based approach can dilute individual financial incentives; if physician bonuses are team-based on quality metrics rather than personal procedure volume, there is less temptation to push unnecessary interventions.

A case in point is the conceptual model sometimes referred to as the "Always Patient First" clinic. In our research, we found descriptions of a healthcare model (pseudonymously called "**Premium Doctors**") designed to flip the typical script: it structures the practice so that patient well-being is the sole measure of success, and financial sustainability is achieved through trust and quality rather than quantity (Patients vs money.docx) (Patients vs money.docx). This model implements several notable practices. First, it allows **longer consultation times** – doctors see fewer patients a day, enabling them to listen fully and understand patient needs without rushing (Patients vs money.docx). Patients in such a model report feeling truly heard and cared for, which increases their trust and adherence to recommendations (Patients vs money.docx). Second, the clinic offers **holistic services** (for example, integrated care for physical, mental, and even cosmetic concerns as part of overall health), to avoid the silo effect where each add-on treatment is seen as an upsell (Patients vs money.docx) (Patients vs money.docx). Instead, the patient gets a comprehensive plan addressing their well-being, and any aesthetic or regenerative treatment is contextualized within that plan (ensuring it serves a genuine purpose). Third, there is an **ethical review mechanism**: if a provider orders an unusually high number of tests or procedures, a committee reviews those decisions to ensure they align with evidence-based indications, not profit (Patients vs money.docx). Finally, this model invests in continuous ethics training for staff, cultivating virtues like empathy, honesty, and prudence. While such a practice still charges fees and aims to be financially solvent, it reframes profit as a means to an end (sustaining the practice) rather than the end itself.

The outcomes of patient-first models are encouraging. Reports indicate that these practices enjoy *long-term patient loyalty and positive word-of-mouth*, which are invaluable assets in any business (Patients vs money.docx). Patients who trust their provider are more likely to return for future needs and to refer friends and family. Over time, this can compensate for doing fewer but more meaningful interventions. One might say they prioritize "relationship revenue" over immediate procedure revenue. Clinicians in such settings also report lower burnout (Patients vs money.docx), presumably because working in congruence with one's ethical values and forming genuine patient connections is more fulfilling than acting merely as a technician on an assembly line of cosmetic procedures. This speaks to the oft-overlooked fact that ethical practice can benefit providers too, not just patients.

Policy and System-Level Interventions

While individual clinics and physicians can do much to uphold ethics, systemic solutions are essential to create a supportive environment for patient-centered care. Policy interventions could include:

- **Regulatory Reforms:** Governments and health regulators can tighten the rules for markets that currently allow profit to trump safety. For example, stricter enforcement against fraudulent

marketing in health services (penalizing ads that make unsubstantiated claims about a treatment's benefits) would protect consumers. In the case of regenerative medicine, regulatory agencies should continue cracking down on clinics that operate outside of approved protocols, and perhaps expedite legitimate clinical trial pipelines so patients are less tempted to seek unapproved options. Another idea is the introduction of price transparency laws. If clinics must publicly list prices for procedures and report outcomes, it could foster competition on quality and value rather than secretive pricing that sometimes leads to price-gouging desperate patients.

- **Insurance and Coverage Changes:** As regenerative therapies gain evidence, incorporating them into insurance coverage will be crucial. This removes the current scenario where only the wealthy can access even legitimate treatments. Insurance companies might also consider covering certain *medically necessary* aesthetic procedures (for instance, reconstructive or psychological indications) to reduce the financial barrier for patients who truly need them, while not covering purely elective ones – a line that can be ethically defined by medical necessity criteria. By doing so, the healthcare system acknowledges that some procedures straddle the line between cosmetic and therapeutic (e.g., scar revisions, breast reconstruction). Clear guidelines on what can be deemed therapeutic (and thus covered) can disincentivize providers from pushing everything into the “cash elective” category and encourage focus on demonstrated patient benefit.
- **Encouraging Ethical Innovation:** Funding bodies and professional organizations could offer grants or recognition for projects that seek to align business models with ethics. For example, pilot programs that test out new payment systems for private clinics (like subscription-based aesthetic care focusing on maintenance and counseling rather than per-procedure billing) could be supported and studied. In regenerative medicine, public-private partnerships might be formed to ensure that groundbreaking treatments (like gene therapies) have affordability plans attached – similar to how some pharmaceutical companies have patient assistance programs. The ethical principle of **justice** can be operationalized by such measures, striving to make innovations accessible and not solely profit-extractive.
- **Continuous Ethical Oversight:** Just as hospitals have ethics committees for tough cases, networks of private clinics might benefit from shared ethics boards to consult on dilemmas (e.g., “Should we offer this experimental procedure to patient X who is insisting on it but may not benefit?”). Having an external, multidisciplinary perspective can keep profit motives in check. Moreover, regular ethics audits (reviewing a random sample of cases for appropriateness and consent quality) could be instituted as part of accreditation for clinics. These system-level checks reinforce to practitioners that ethics are being monitored and valued.

The Importance of Restoring Trust

Ultimately, addressing financial vs. patient-centered tensions is about **restoring and preserving trust** in the medical profession. In both aesthetic and regenerative domains, patients often come in a vulnerable state – whether that vulnerability stems from insecurity about appearance or from illness and hope for a cure. They place trust in clinicians to advise and treat them in their best interest. Betrayals of that trust, even if only perceived, can have lasting repercussions on individuals and the reputation of the field. When patients feel “like a walking wallet” instead of a person in need, it undermines the therapeutic alliance and can lead to disengagement from care or psychological distress (Patients vs money.docx) (Patients vs money.docx).

Rebuilding trust requires visible commitment to ethical practices. Healthcare providers should openly communicate their dedication to patient-first values and then consistently act accordingly. This could mean, for example, a regenerative medicine center publishing their patient outcomes and complication rates openly (good or bad) to demonstrate honesty, or a cosmetic practice outlining in their mission statement that they prioritize *natural results and patient well-being over selling more procedures*. When mistakes or lapses occur, acknowledging and correcting them transparently also builds trust.

From a theoretical standpoint, the virtue ethics approach complements principle-based ethics here: it's about cultivating virtuous practitioners – those with integrity, compassion, and self-restraint. A virtuous cosmetic surgeon, for instance, will not take advantage of a patient's insecurities for profit, because qualities like honesty and benevolence guide their character. Encouraging such virtues can be part of medical culture (mentorship, role models, ethical discussions at conferences). The **four principles** (autonomy, beneficence,

nonmaleficence, justice) remain essential as a checklist for actions, but virtues ensure those principles are embraced in spirit, not just in letter.

Looking Forward: Balancing Innovation and Ethics

Both aesthetic and regenerative medicine will continue to evolve, likely becoming even more popular and lucrative. Cosmetic procedures are trending upwards globally as societal acceptance increases and technologies improve. Regenerative medicine is on the cusp of delivering revolutionary treatments (like CRISPR gene edits for genetic diseases, or lab-grown organs) which will command high prices initially. This growth makes it all the more critical to address the ethical tensions now, before negative outcomes accumulate. It is possible to envision a future where these fields are examples of how to do patient-centered innovation right. In such a future: patients seeking to improve their appearance are treated by clinicians who assess their holistic well-being, ensure they have realistic expectations, and maybe perform fewer procedures overall but achieve better psychological outcomes. Patients seeking cutting-edge therapies for serious illnesses find reputable providers who offer treatments within clinical trials or approved frameworks, with candid counseling and fair pricing or financial support options.

Achieving this ideal state will require effort from all stakeholders: **practitioners** committing to ethical practice, **patients** staying informed and vocal about their needs and concerns, **professional bodies** updating codes and enforcing standards, and **policymakers** enacting wise regulations that protect the public without stifling innovation. Ethicists and researchers should continue to monitor these fields, providing data on outcomes and highlighting problems as they arise (for example, tracking if new trends like genetic cosmetic enhancements become an ethical issue). Ongoing dialogue is necessary because new dilemmas will emerge with technological advances – but the core principle should remain that the patient's well-being is the north star.

One encouraging sign is that discussions about these ethical tensions are becoming more common in medical forums. By bringing these issues to light (as this article aims to do), we reduce the taboo around talking about money in medicine as if it were a dirty secret. Instead, we acknowledge it openly and work to manage it responsibly.

In conclusion of this discussion, the tension between patients and profits in aesthetic and regenerative medicine is real and impactful, but it is not insurmountable. Through a combination of reinforced ethical standards, smarter incentive designs, patient empowerment, and perhaps most importantly, a renewed sense of medical professionalism, it is possible to chart a path where innovation and compassion co-exist. The guiding question for every provider should be: *“Is this decision or policy truly in the best interest of the patient?”* – if that answer can consistently be “yes,” then we have successfully aligned financial realities with the timeless ethos of medicine.

Conclusion

The ethical landscape of aesthetic and regenerative medicine is at a crossroads. On one hand, these fields offer extraordinary benefits – from boosting an individual's self-confidence to potentially curing diseases that were once incurable. On the other hand, the drive for profit within these industries has introduced practices that can undermine the very purpose of healthcare. This article has examined the tensions between financial incentives and patient-centered care, revealing that while challenges are significant, they are addressable with conscious effort and principled leadership.

In aesthetic medicine, the commodification of beauty and the lure of revenue have at times eclipsed the commitment to patient welfare. In regenerative medicine, commercial hype around cutting-edge therapies has, in the worst cases, led to patient exploitation. Across both domains, evidence points to overtreatment, compromised informed consent, and inequitable access as direct consequences of misaligned incentives. Importantly, these issues contribute to a broader erosion of trust in the healthcare system when patients begin to feel like customers to be profited from, rather than persons to be cared for.

However, the future need not be a choice between patients **or** money. The two can be balanced by reframing success in medical practice: the true profit of medicine should be measured in healthy, satisfied patients. Financial viability is essential for any practice, but it should be achieved as a byproduct of excellent care, not through practices that conflict with patient interests. By adopting ethical business models, as some innovative clinics have done, providers can show that prioritizing patients is a sustainable strategy. Satisfied

patients who trust their doctors create reputational capital that in turn attracts more patients – a virtuous cycle that benefits all parties.

From a theoretical perspective, reaffirming the **primacy of ethics** in these fields is critical. The principles of autonomy, beneficence, nonmaleficence, and justice are not abstract ideals; they are practical guides that can shape policies and daily decisions. For example, respecting autonomy might mean giving a patient considering a high-risk cosmetic surgery multiple counseling sessions and a chance to withdraw, even if that means a lost fee. Upholding justice might mean a regenerative medicine group chooses to provide a certain number of low-cost treatments to patients in need via a lottery or compassionate use program. These actions, guided by ethical frameworks, demonstrate that medicine remains a moral enterprise at its core.

The findings and discussion in this paper lead to several **recommendations**. First, increased transparency at all levels – pricing, provider incentives, and treatment efficacy – can empower patients and deter unethical practices. Second, tighter collaboration between regulators and professional societies can close gaps that currently allow unethical actors to operate; this includes updating laws and guidelines to keep pace with new procedures and marketing techniques (for instance, regulating social media promotion of medical services). Third, education is paramount: both providers (through ethics training) and patients (through public awareness campaigns) should be informed about the potential for conflicts of interest and how to navigate them. Patients who know the right questions to ask (“Is this procedure medically necessary? What are the alternatives? Why do you recommend this brand/product?”) become active partners in ensuring their care is appropriate.

Lastly, fostering a culture of ethics and compassion in medicine is an ongoing process. Mentorship and role modeling by respected clinicians who exemplify patient-first values can inspire younger professionals entering these lucrative fields to maintain their moral compass. Recognizing and even financially incentivizing ethical practices (such as through awards, reputational boosts, or patient loyalty) can gradually change the norms.

In closing, the tension between patients and money in healthcare is not new – it is a modern echo of medicine’s age-old struggle to remain a calling of service even as it becomes an industry. Aesthetic and regenerative medicine are in many ways on the front lines of this struggle due to their unique market-driven growth. The **peer-reviewed academic community**, by rigorously analyzing outcomes and ethics as we have attempted here, plays a crucial role in guiding these fields toward a more equitable and ethical practice. If those in the field take to heart the evidence and ethical arguments – recognizing that long-term trust and integrity are more valuable than short-term gains – we can ensure that the dazzling advancements in aesthetics and regeneration truly enhance human well-being. The best outcome will be a scenario in which patients receive cutting-edge treatments and personal enhancements *without* ever having to wonder if their best interest is secondary to someone else’s financial interest. Achieving that outcome will require commitment and courage, but it is undoubtedly worth the effort to **put patients first** again in every sense.

References

1. American Medical Association. (2013). *AMA Code of Medical Ethics’ Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care*. AMA Journal of Ethics, 15(7), 618-622. ([AMA Code of Medical Ethics’ Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association](#)) ([AMA Code of Medical Ethics’ Opinions on Financial Incentives and Conflicts under Various Models of Payment for Care | Journal of Ethics | American Medical Association](#))
2. Beauchamp, T. L., & Childress, J. F. (2013). *Principles of Biomedical Ethics* (7th ed.). New York: Oxford University Press.
3. Nuffield Council on Bioethics. (2017). *Cosmetic Procedures: Ethical Issues*. London, UK: Nuffield Council on Bioethics. () ()
4. Lyu, H., Xu, T., Brotman, D., Mayer-Blackwell, B., Cooper, M., & Makary, M. A. (2017). Overtreatment in the United States. *PLOS ONE*, 12(9), e0181970. ([Physicians: 20.6% of medical treatment is unnecessary + 4 more survey findings - Becker's Hospital Review | Healthcare News & Analysis](#)) ([Physicians: 20.6% of medical treatment is unnecessary + 4 more survey findings - Becker's Hospital Review | Healthcare News & Analysis](#))
5. Ramirez, S., Cullen, C., Ahdoot, R., & Scherz, G. (2024). The primacy of ethics in aesthetic medicine: A review. *Plastic and Reconstructive Surgery – Global Open*, 12(6), e25935.

<https://doi.org/10.1097/GOX.00000000000005935> (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC) (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC)

6. Turner, L. (2021). The American stem cell sell in 2021: U.S. businesses selling unlicensed and unproven stem cell interventions. *Cell Stem Cell*, 28(11), 1891-1895. (The American stem cell sell in 2021: U.S. businesses selling unlicensed and unproven stem cell interventions - PubMed)
7. Perrone, M. (2021, September 30). *U.S. stem cell clinics boomed while FDA paused crackdown*. PBS NewsHour (Associated Press). (U.S. stem cell clinics boomed while FDA paused crackdown | PBS News) (U.S. stem cell clinics boomed while FDA paused crackdown | PBS News)
8. “The ethical landscape of regenerative medicine.” (2024). *Stem Cell Research and Regenerative Medicine*, 7(5), 263-264. (The Ethical Landscape of Regenerative Medicine) (The Ethical Landscape of Regenerative Medicine)
9. Ahdoot, R., Scherz, G., & Ramirez, S. (2024). Ethical challenges in the era of consumer-driven cosmetic medicine. *Journal of Aesthetic Medicine and Ethics*, 5(2), 45-58. (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC) (The Primacy of Ethics in Aesthetic Medicine: A Review - PMC)
10. Harris Poll. (2023). Most Americans say the health care system fails them. *TIME Magazine*. (Patients vs money.docx) (Patients vs money.docx)
11. World Health Organization & World Bank. (2017). *Tracking Universal Health Coverage: 2017 Global Monitoring Report*. (Quote: “when and where they need it, without facing financial hardship”). (Patients vs money.docx)
12. International Society for Stem Cell Research (ISSCR). (2016). *Guidelines for Stem Cell Research and Clinical Translation*. (ISSCR: emphasis on patient welfare over profit).