Letter to the editor

Ethical Use of Social Media by Lab Professionals: A Self-Assessment SAFE-POST Checklist from the IFCC Task Force on Ethics

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To the Editor,

Social media has been a game changer for the mass dissemination of scientific knowledge in the rapidly advancing field of laboratory medicine. Platforms like LinkedIn, Facebook, X (previously Twitter), WhatsApp, Telegram, YouTube, and professional online forums have evolved into useful avenues for case discussions, professional networking, continuing education, and scientific exchange in recent years. Pathologists and clinical laboratory professionals, who have conventionally been in less visible roles, are now increasingly projecting via social media to advocate for laboratory medicine, expand outreach, and foster interdisciplinary collaborations [1]. This evolution became more evident during the COVID-19 pandemic era, where laboratory medicine's online presence via social media platforms was widely portrayed not only for public health awareness, but also for the dissemination of scientific information [2].

Social media landscape extensively covers the attributes of big data i.e., volume, velocity, variety, veracity, and value. Every day, vast amounts of content are uploaded across diverse platforms and reach broad audiences. One on hand, it offers important windows for communication, education, and knowledge exchange. Conversely, it also poses challenges regarding the accuracy, interpretation, and enduring impact of information that can spread rapidly and remain publicly accessible long after it is shared. [3]. It has the potential to contribute to misinformation, particularly when complex laboratory concepts are generalized, preliminary findings are discussed without adequate context, or emerging evidence is circulated before sufficient validation [4]. For instance, posts describing novel laboratory tests or preliminary research findings prior to sufficient clinical validation may inadvertently overestimate their utility. Similarly, presenting rare case experiences without mentioning limitations may lead to misconceptions. For laboratory professionals, "out of context" may include isolated screenshots of case discussions, excerpts from scientific debates, or educational posts viewed without accompanying explanations, disclaimers, or supporting evidence.

Many educational posts that include lab images, diagnostic reports, screenshots, case discussions, or rare case studies have the potential of inadvertently compromising patient confidentiality, even when identifiers have been removed [5]. In some cases, even minor details such as metadata, internal institutional information, partially hidden accession numbers, very rare laboratory findings, or supplementing contextual clinical information may still allow indirect patient identification. This in turn poses valid reputational risks for individuals, laboratories, and institutions if it portrays, inappropriate communication, or confidentiality breach which has the potential to lead to weakened public trust [6]. Likewise, respectful communication is equally important in online spaces, where scientific discussions may naturally involve differing opinions. In situations such as responding to an opposing viewpoint, correcting misinformation, laboratory professionals should strive to maintain a respectful, constructive, and professional tone. Even when disagreements arise, comments should remain focused on the scientific issue rather than becoming dismissive. In various instances, professionalism extends beyond clinical or patient based discussions. Lab professionals should keep in mind that posts made in a professional capacity or publicly associated with their identity may also affect public confidence in their affiliated institution and the profession.

Data privacy and consent are also vital concerns in the use of mass messaging tools. Platforms such as WhatsApp are increasingly used for rapid professional communication, educational case discussions, troubleshooting, and peer consultation. While these applications offer considerable convenience, they also raise important ethical challenges [7]. Professional WhatsApp groups deserve careful consideration where informal discussions, and screenshots can be re-shared without permission, and even supposedly de-identified laboratory data could unintentionally allow incidental patient identification. From beneficence perspective, these tools should complement rather than replace standard institutional communication systems and secure clinical pathways [8]. Furthermore, as artificial intelligence (AI) tools become increasingly utilized for content creation, there is growing emphasis to remain vigilant and strict verification of potential AI generated inaccuracies, fabricated references, and illustrative images that could unintentionally misrepresent laboratory findings.

Keeping in view the core ethical principles (Beneficence, Maleficence, Autonomy and Justice) and scientific integrity, laboratory professionals have a responsibility to ensure that posting via their social media platforms is accurate, balanced, and presented within its proper scientific context [9, 10]. Caution is needed when discussing emerging evidence, such as pre-validation interpretation or overstating the strength of findings has the potential to lead to more harm than the intended benefit. With this objective in sight, the concept of an "Ethics Checklist for Social Media" was first proposed at the IFCC Task Force on Ethics (TF-E) meeting in Milan in 2026. The preliminary draft was prepared by a full member of the IFCC TF-E who had previous experience in social media coordination with the IFCC Committee on Internet and Digital Communications (C-CIDC). The checklist was built upon fundamental ethical principles that guide professional practice in laboratory medicine. Its domains were focused on encouraging beneficial and responsible communication while emphasizing respect for individuals, protection of confidentiality, scientific integrity, transparency, accountability, and the maintenance of public trust.

The draft of the checklist was subsequently presented to the IFCC Task Force on Ethics for discussion and review. Seven members provided feedback on the wording, clarity, ethical relevance, applicability across different laboratory medicine scenarios, and feasibility of use as depicted in Figure 1.

The overall idea was balancing comprehensiveness with practicality, ensuring that the checklist addressed emerging ethical challenges while remaining relatively simple and user friendly. Based on the feedback received via an iterative expert consensus process, the checklist was revised. The revised checklist was circulated to all Task Force members, and the final version was approved by consensus before submission. (Table 1), comprising experienced laboratory professionals from diverse countries, and practice settings. Although formal external validation with additional stakeholder groups was beyond the scope of this initial work, future studies may evaluate its usability.

The checklist has the potential for the development across diverse laboratory settings and can be relevant for laboratory organizations, scientific societies, and individual professionals seeking to practice ethical social media engagement. This check

list is not meant to be used as a formal clearance process, but rather a useful self-assessment tool to promote introspection prior to posting. When any item on the checklist gets a negative response, users should edit or postpone it and, if necessary (for example, if there are issues with confidentiality, institutional policy, or legal inferences), ask for feedback from an impartial and trusted peer before publishing. Institutions may also integrate the checklist into social media policies, orientation programs or professionalism training. The TF-E acknowledge that the checklist relies on professional judgment and should complement, rather than replace, institutional governance frameworks, in accordance with relevant local legislation, regulatory requirements, and institutional policies.

Figure 1: Flow chart of checklist development process.

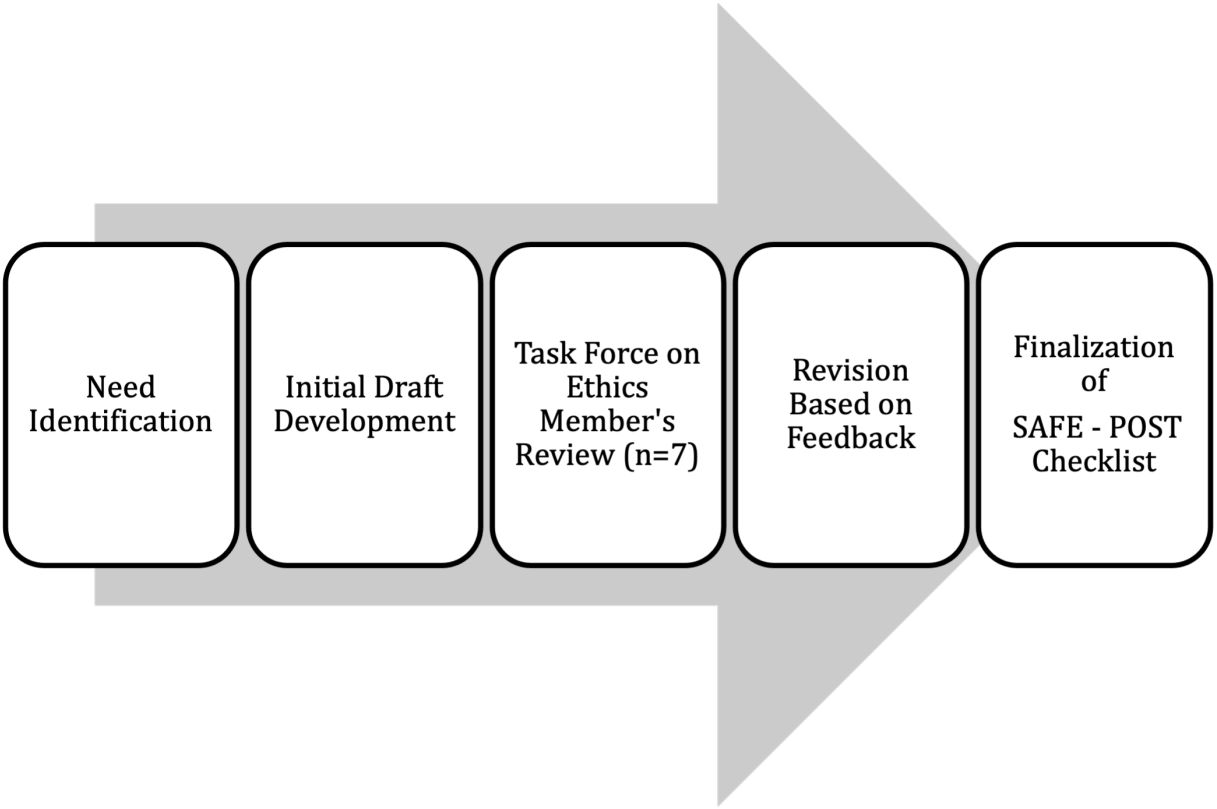


Table 1: SAFE-POST Ethical Checklist.

Domain	SubDomain	SelfAssessment	Response Check
Autonomy	Transparency	Have conflicts of interest, affiliations, and sponsorships been appropriately disclosed?	□ Yes □ No If No: modify before posting
Autonomy	Professionalism	Would this post reflect positively on the profession and the institution if reviewed publicly?	□ Yes □ No If No: modify before posting
Autonomy	Respect for Persons	Does the post maintain respectful language toward peers, patients, and differing opinions?	□ Yes □ No If No: modify before posting
Beneficence	Educational Benefit	Does this post provide meaningful educational, scientific, or public health value?	□ Yes □ No If No: modify before posting
Beneficence	Public Trust	Does this post strengthen trust in laboratory medicine and scientific communication?	□ Yes □ No If No: modify before posting

Domain	SubDomain	SelfAssessment	Response Check
Beneficence	Scientific Integrity	Is the content evidence- based, appropriately contextualized, and free from misleading claims or exaggeration? If AI assisted content generation was used, has the information been reviewed for scientific accuracy?	□ Yes □ No If No: modify before posting
Nonmaleficence	Harm Prevention	Could this post contribute to misinformation, unsafe clinical behavior, panic, or misinterpretation?	□ Yes □ No If Yes: modify before posting
Nonmaleficence	Confidentiality & Privacy	Have patient identifiers, metadata, images, and contextual clues been adequately removed or consent obtained?	□ Yes □ No If No: modify before posting
Nonmaleficence	Accountability	Would this post remain acceptable if permanently archived or publicly scrutinized or reshared out of context?	□ Yes □ No If No: modify before posting
Justice	Professional Competence & Equity	Is this post within area/scope of professional competence, acknowledging limitations and promoting unbiased scientific engagement?	□ Yes □ No If No: modify before posting
Justice	Acknowledgment & Attribution	If the post is reshared/forwarded/reposted has the original sender been acknowledged?	□ Yes □ No If No: modify before posting

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Ethical Approval

Not required as study does not involve human subjects or data.

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Author Statement

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