

**How to cite this article:**

González-Betancourt E,
García-Herrera A.
Teledermatology: a
potential for the
professional formation.
MedEst. [Internet]. 2026
[cited access date];
6:e529. Available in:
<https://revmedest.sld.cu/index.php/medest/article/view/529>

Palabras Clave:

Teledermatología,
Formación Profesional,
Interdisciplinariedad,
Gestión del Conocimiento.

Keywords:

Teledermatology,
Vocational Training,
Interdisciplinarity,
Knowledge Management.

Corresponding author:

evelyn.betancourt@umcc.cu

Received: 20/03/2026

Accepted: 25/03/2026

Published: 28/03/2026

Editor(s) in charge:

Shania Naranjo Lima.

Translator:

MSc. Meliza Maura Vázquez
Núñez.

Layout designer:

Carlos Luis Vinageras
Hidalgo

Teledermatology: a potential for the professional formation**Teledermatología: un potencial para la formación profesional**

Evelyn González Betancourt ^{1*}  Arístides Lázaro García Herrera ¹ 

¹ Faustino Pérez Provincial Clinical Surgical Teaching Hospital. Matanzas, Cuba.

² University of Medical Sciences of Matanzas. Matanzas, Cuba.

Dear readers:

The rapid development of information and communication technologies (ICTs), the globalized nature of contemporary society, problems of medical coverage and the geographical dispersion of specialists, complex epidemiological situations, natural disasters, and economic contingencies, among other factors, elevate the significance of teledermatology for professional training. ⁽¹⁻⁷⁾

Understood as one of the applications of telemedicine, it allows for the exchange of medical information remotely, using audiovisual and data communication, through the use of ICTs in dermatological care. It is a highly innovative, telematic alternative proposal, complementary or supplementary to some in-person dermatological procedures, with an integrated scope encompassing clinical, educational, research, and managerial functions. ^(1,2)

The incorporation of digital platforms for teaching and clinical practice, as well as the capacity of virtual environments to generate interdisciplinary, interprofessional, and interinstitutional relationships within the healthcare system, opens a horizon of pedagogical innovation for optimizing dermatological professional training. ^(3, 7)

Incidentally, this editorial aims to promote evaluative criteria regarding the potential of teledermatology for professional training, highlighting general pedagogical aspects, advantages, disadvantages, and its importance for knowledge management in health.

The following are some pedagogical aspects of teledermatology that enhance the educational value of undergraduate and postgraduate curricula. These include:

- Interdisciplinarity: Tele dermatology integrates knowledge from various scientific disciplines, such as Dermatology, Informatics, Medical Education, Medical Law, and Public Health, among others;
- Broad access: It allows students, residents, and specialists to participate in clinical discussions without geographical barriers;
- Pedagogical flexibility: It fosters hybrid communication modalities (synchronous and asynchronous) that adapt to different learning paces;
- Collaborative knowledge management: It optimizes group work and strengthens the creation of digital repositories of clinical cases, images, protocols, and other telematic resources; and
- Adherence to ethical and legal precepts: It promotes compliance with ethical principles and legal norms related to the doctor-patient relationship, data protection, and informed consent in virtual environments, as stipulated in the legal framework. ⁽¹⁾

Among the advantages associated with its use, in the educational sphere, some related to undergraduate professional training are recognized, such as:

- early familiarization with diverse clinical cases;
- the use of problem-based learning methods in the teaching-learning process, with access to images and descriptions of pathologies in real time;
- collaborative work through group knowledge management, interactive discussion, and clinical reasoning on widely accessible platforms;
- the development of digital competencies, based on the acquisition of knowledge, skills, and values related to working with telematics resources in health; and
- the link with primary care, through the development of professional practices associated with telematics tools such as teleconsultation and teleinterconsultation, for the prevention and/or early detection of skin diseases. ^(3, 7)

In the case of postgraduate studies, the following are identified:

- continuous specialized training, based on the participation of residents and specialists in teleinterconsultations with national and international experts;
- The integration of dermatological instruments with telematic resources to optimize teledermoscopy and the use of diagnostic tools;
- The ongoing updating of professional knowledge by facilitating access to virtual seminars, conferences, and real-time clinical cases;

- The development of collaborative research, which enriches scientific output and generates multicenter databases through group work; and
- The optimization of interprofessional and interinstitutional relationships through coordination and access to knowledge networks, interdisciplinary research groups, and online teaching. (1, 2, 7)

Teledermatology not only transmits information but also fosters the systematization and interdisciplinary construction of knowledge through the use of digital platforms supported by communities and collaborative groups that generate institutional alliances. Hence, its capacity to enhance pedagogical innovation and transform traditional teaching into a highly formative process that is interdisciplinary, dynamic, participatory, and global. (2)

There are challenges that Teledermatology must overcome that affect its educational dimension, namely:

- the digital divide, resulting from difficulties in connectivity, access to appropriate telematic devices, and the development of digital skills among those involved;
- limitations for comprehensive physical examination;
- methodological shortcomings, requiring continuous improvement in the methodological preparation of teachers and the sustainable production of telematic resources for teaching; and
- regulatory gaps, which necessitate overcoming the lack of integrative legal frameworks to strengthen the scope of pedagogical models and the curricular design of programs. (1, 2-4, 6)

Teledermatology applied to professional training constitutes an organizational form of dermatological medical education in virtual environments. Its pedagogical model considers professional problems and demands of the workplace, the requirements of the doctor-patient relationship, tutored work, strict adherence to bioethical precepts, the didactic significance of the problem-based learning method, group work, and the axiological significance of humanism, responsibility, solidarity, and internationalism as essential elements of the pedagogical process contextualized within medical education.

Dear readers, having concluded the presentation of some aspects related to the potential of teledermatology for professional training, its pedagogical impact on the development of knowledge, skills, values, and highly creative, integrative performance is remarkable. These skills respond to the clinical, educational, research, and

managerial demands outlined in the professional profile of the curricula.

Note, then, the academic significance and relevance of this topic for dermatological professional training, given the current conditions of educational practice, mediated by an economic contingency that limits the development of in-person activities and leads to the decentralization of medical education towards primary health care. Hence, the need to optimize the development of teledermatology as a strategic component of medical education.

BIBLIOGRAPHIC REFERENCES

1. González Betancourt E, García Baró Y. La teledermatología desde un posicionamiento integrador de las funciones profesionales en el sector salud. Revista Humanidades Médicas [Internet]. 2025 [cited 21/02/2026]; 25(2025): e2809. Available in: <https://humanidadesmedicas.sld.cu/index.php/hm/article/view/2809/pdf>
2. Veliz González J. La Dermatología en la era digital, ventajas y desafíos. EsTuSalud [Internet]. 2026 [cited 21/02/2026]; 8(2026):e461. Available in: <https://revestusalud.sld.cu/index.php/estusalud/article/view/461>.
3. Saieg Viguera ME. El rol emergente de la inteligencia artificial en dermatología: aplicaciones clínicas y desafíos, una revisión bibliográfica de la evidencia reciente. Rev Conflu [Internet]. 2026 [cited 29/02/2026]; 9 (1): 355-371. Available in: <https://doi.org/10.52611/confluencia.2026.1703>
4. Esqueff Díaz N. Teledermatología: tipos, ventajas y desventajas. Medimay [Internet]. 2023 [cited 21/07/2024]; 30(3): 404-406. Available in: <https://revcmhabana.sld.cu/index.php/rcmh/article/view/2413>
5. Seijo Cortés JA, Ramos Garibay JA, Valdéz Velasco JJ, Meneses Delgadillo LE, Ángeles Alcántara JL. La pandemia por covid-19: el crecimiento de la telemedicina y la teledermatología. Revista Dermatología CMQ [Internet]. 2023 [cited 21/09/2024]; 21(2):148-167. Available in: <https://dcmq.com.mx/edicion-eneo-marzo-2023-volumen-21-n%C3%BAmero-1/1014>
6. Aribel Talamantes A, Socorro Álvarez Villaseñor A, Ibarra Urzua H, García Valdez R. Beneficios obtenidos con la consulta de teledermatología en Guerrero Negro, Baja California Sur. Horizonte

sanitario [Internet]. 2022 [cited 21/09/2024]; 21(1): 105-112. Available in: <http://dx.doi.org/10.19136/hs.a21n1.4531>

7. González Betancourt E, García Baró Y. The teledermatology and the professional tasks for their integral administration. En: Castillo González W, Vitón Castillo AA, López Sánchez AA, editores. Health 4.0: management, technology, and transformation of the healthcare sector in Latin America. Uruguay: South American Publishing; 2025.p.122-133. Available in: <https://doi.org/10.62486/978-9915-704-08-1>

8. González Betancourt E, García Baró Y, Jiménez Sánchez L. La interdisciplinaria en el posgrado: algunas consideraciones teórico-metodológicas para su optimización. Maestro y Sociedad [Internet]. 2025 [cited 21/01/2026]; 22(1): 376-384. Available in: <http://maestrosociedad.uo.edu.cu/index.php/Mys/article/view/6795/8243>

9. Ministerio de Educación Superior. Resolución 145/2023 Reglamento para la aplicación de las categorías docentes de la Educación Superior. Gaceta Oficial de la República de Cuba [Internet]. 2023 [cited 11/03/2026]; 117 (2023). Available in: <https://www.gacetaoficial.gob.cu/es/resolucion-no-145-reglamento-para-la-aplicación-de-las-categorías-docentes-de-la-educación-superior>

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

USE OF ARTIFICIAL INTELLIGENCE

The authors declare that no artificial intelligence was used in the writing of this manuscript.