

The Management of the Healthcare Professions in the Prevention Area: Organizational Set-up and Perspectives for Improvement in the Current Italian Panorama

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ABSTRACT

The structure of the management of healthcare professions in the prevention area currently appears not uniform at Italian national level, both in terms of the allocation of these professionals and concerning the role covered in the Local Health Authorities. During training events dealing with this topic, organized by the Italian Society of Hygiene, Preventive Medicine and Public Health - S.It.I., healthcare workers (HCWs) placed in the management area were evaluated through a survey, examining their level of involvement in the organization, and proposing ideas for improvement regarding the professional placement both in staff and in line. The thoughts on the new hypothetical organizational models adoptable must continue to include the valorization and career development of HCWs, also to allow to tenaciously challenge the scenarios that Public Health will be called upon to face with ever greater commitment.

Introduction

Healthcare Workers (HCWs), understood as non-medical professionals operating in the Italian National Health Service, are approximately 333,000. Of these, 9,400 belong to the prevention area (1). In the current system, this compound consists of Health Visitors (HVs) and Environmental Health Officers (EHOs): both professionals are classified as health professionals and officers, within the scope of the national collective agreements applicable to the healthcare branch. Furthermore, Osteopaths have recently been placed in the same area (2).

HVs and EHOs represent the suitable professionals for performing preventive activities: with the respective professional profiles, both the HCWs operate in a complementary and synergistic way (3).

According to current health legislation, an HV is responsible for health prevention and promotion, and for providing education to people, families, and the community; identifies the priorities for preventive, educational, and recovery intervention; and plans and implements health education interventions for people of all ages of life, as well as campaigns for health promotion and education (4).

The EHO oversees prevention, verification, and control activities concerning hygiene in the areas of living and workplaces, food and beverage, public health, and veterinary hygiene. The professional controls living and working environments, the safety of structures and systems, and their regulatory compliance, including the environmental prevention field (5).

The national set-up of the management of healthcare professions takes into account a subdivision by four areas: nursing and obstetrics, rehabilitation, techniques, and prevention. Concerning the contractual framework, the applicable rule provides for the single qualification of the manager of the healthcare professions of nursing, techniques, rehabilitation, prevention and obstetrics (6). Currently, after five years of contractual framework and related experience, both HVs and EHOs can access the open competitive exam to have the position of manager of the preventive healthcare professions.

The most recent survey carried out by the Italian Ministry of Health relating to all HCWs placed in the Italian National Health Service, published in 2023, highlights n. 633 healthcare managers belonging to all areas employed in Local Health Authorities (7). It follows that for every 525 HCWs set in the health professionals and officers' area, there is only one HCW placed in the management area.

Recent training events promoted by the Italian Society of Hygiene, Preventive Medicine and Public Health (S.It.I.), have allowed the creation of useful synergies between professionals of different origins and backgrounds, encouraging a discussion on organizational models applicable to the management of healthcare professions belonging to the prevention area. In this setting, information was collected regarding the level of involvement in the organization, and whether the placement in the Management Operational Units is in staff or in line.

Materials and Methods

Voluntarily enrolled S.It.I. members were asked to fill a standardized questionnaire while attending the 2024 annual training event organized by the Consulta delle Professioni Sanitarie. The single requirement for the enrollments was to be a healthcare professional contractualized in the management area.

Overall, 96 professionals participated to the training event held in June 2024 in Padua, and 14 were managers of the preventive healthcare professions. The survey comprised an original questionnaire written in Italian consisting of the following sections:

- Geographical area of origin;
- Allocation in the Local Health Authority (staff o line);
- Operating Unit of affiliation;
- Autonomy in the management;
- Human resources assigned.

Furthermore, short open-ended answers were required, to briefly investigate the role covered and the future perspectives for the profession development.

The investigation was performed in accordance with the World Medical Association Declaration of Helsinki and did not include any experiments involving human or biological human samples, nor research on identifiable human data.

Results

Of the 14 professionals eligible for recruitment, 13 (92,9 %) joined the study. The questionnaire results are shown in Table 1.

Geographical area of origin	Allocation	Autonomy in management	Human resources assigned
North	Prevention Department Staff	yes	yes
North	Prevention Department Staff	yes	yes
North	Prevention Department Staff	yes	yes
North	Prevention Department Staff	yes	no
North	Healthcare Professions Directorate	yes	yes
North	Healthcare Professions Directorate	yes	yes
North	General Management Staff	yes	yes
North	General Management Staff	yes	yes
Centre	Prevention Department Staff	yes	yes
Centre	General Management Staff	yes	yes
South	Prevention Department Staff	yes	no
South	Prevention Department Staff	yes	yes
South	General Management Staff	yes	yes

Table 1. Results provided by the 13 professionals who joined the study.

The geographical distribution was characterized by 61.5% of professionals working in the Northern Italy, 15.4% in Central Italy and 23.1% in the South. All managers are placed in staff and benefit from managerial autonomy. Human resources were directly assigned to the majority of participants (84.6%).

Current organizational set-up

As our results show, the current allocation of managers of healthcare professions in the prevention area is not homogeneous, mainly due to the regional guidelines for the declination of the individual Acts of Local Health Authorities. At present, in our Country there is no overlapping consistency for this professional, often placed in staff to the Prevention Department Direction or to the Complex Operating Unit of the Healthcare Professions Directorate. Within the same Region, both hierarchical and functional dependence could be different, depending on the Local Health Authority organization.

In many Regions (e.g. Puglia and Veneto), the placement provides for the assignment of Simple Operating Units, differently named: Prevention Technical Service, Health Professions of the Prevention Department, etc (8-10). In the Autonomous Province of Trento, this structure currently provides for a division as a Complex Operating Unit. The Friuli Venezia Giulia Region provides for care platforms, or organizational divisions to which professional or management responsibilities are attributed (11,12).

In compliance with the staff organization, the role covered by the manager, which was stated in the open-ended answers provided by the participants, is shown in Table 2.

Participation and collaboration	Contribution and promotion	Direct management
Participation in the Management Committee	Promoting both professional valorization and accountability, in addition to multi-professional integration, also drawing inspiration from the principles of task-shifting, where applicable (13,14)	Recruitment, acceptance and integration process of new hires, promoting the correct use of the job description (15)
Planning and implementation of Public Health programs	Identification of the objectives entrusted to the Prevention Department, representing an active part in the performance cycle	Guaranteeing minimum quota, mapping the personnel and identifying the qualitative and quantitative allocation of HCWs within the Prevention Department, arranging the assignment and acting on internal mobility procedures, both within the Prevention Department and between different areas; the organizational complexity of human resources to be managed takes into account both contractual institutions and assessments of suitability for the specific job, issued by competent doctors
Participation to the Local Plan for the fight, prevention and contrast of infectious emergencies (PanFlu), promoting its organization and carrying out the simulations concerning hypothetical emergency scenarios (SIMEX-PEACE)	Ensuring the integration between HCWs, promoting uniformity of procedures and operating instructions within the activities of both HVs and EHOs	Evaluating the individual performances of HCWs and carrying out verification activities of preventive and control activities, both on-site and afterwards
Optimization of the use of technologies and goods, promoting their suitable use	Promoting a process approach, encouraging the overcoming of the divisional model and aiming at the quality improvement of preventive work lines	Active part in scientific research activities and dissemination of best practices
Collaboration with the University Degree Courses	Contributing to the implementation of training courses intended for the HCWs, developing projects based on expressed and unexpressed needs, and organizing training events delivered on-site, on-the-job, or as a blended way	Direct working relationship with the holders of organizational and professional functions, placed in the Prevention Department
Collaboration with other areas of healthcare professions (nursing-midwifery, technical and rehabilitation)	Promoting and supporting the application of guidelines, best practices and procedures in the field of clinical risk, privacy, transparency and anti-corruption legislation	Promoting the career development of HCWs, spreading the culture of quality, safety and health

Table 2. Open-ended answers, grouped by category of involvement.

Furthermore, the manager of the healthcare professions in the prevention area actively cooperate with colleagues from other areas to define the needs of all HCWs; for the homogeneous governance of non-managerial human resources; to define the training plan, promoting the acquisition of specific skills, according to a transversal approach; to propose, based on a network logic, innovative organizational and development models and to participate in multidisciplinary work groups (age diversity management, organizational well-being, etc.).

Within the Operating Units in which the professional is placed, a defined personnel structure is not usually foreseen as staff for supporting the needs, but in this setting both administrative personnel and other HCWs would certainly find a place.

In some organizations, the managers of the healthcare professions in the prevention area are placed in staff at the General Management, taking on the role of Responsible of the Prevention and Protection Service (RSPP), ensuring the execution of the risk assessment and the identification of all prevention and protection measures, including the acquisition of gears and personal protective equipment (16). Therefore, the RSPP manager participates in the definition of policies on health and safety, ensuring their alignment with the operational needs and strategic objectives of the Local Health Authority, proposing and organizing the training events (general and specific training, mandatory for all workers and equalized, and targeted, for the different safety actors), assisting the Local Health Authority administration to ensure the organization of emergency procedures. This role is systematically connected with the Occupational Medicine Operating Units, with the Hospital Medical Directorates, with the Superintendence and Logistics (i.e. Technical-Patrimonial Management), etc. Furthermore, the professional is involved in: radiological risk commission; committee for the prevention of hospital infections; and of the teamwork for clinical risk management. The manager could also hold the position of Executive Director of Contracts, having value in the field of safety at work, adopting and implementing the Health and Safety at Work Management System, as well as the Fire Safety Management System. In some organizations this role also includes issues related to the hospital waste management.

Future development perspectives

As our survey revealed, the current organizational structures of the healthcare professions show diversified models across the Country. Taking into account the complexity of the functions and the multiplicity of skills pertaining to the healthcare professions, the model must be oriented towards enhancing functions and responsibilities aimed at enabling: the management of professionals; the governance of the relevant processes; and the support for transversal management processes.

These features may be practiced both in staff and in line, provided that sufficient resources are guaranteed to govern the complexity in organizations where many HCWs belong to different profiles and dissimilar specialist extractions. The aim is to ensure greater management and direction ability in professional development, implementing economies of scale logics, thus allowing to overcome the “silo logic” towards a greater integration, also promoting specific skills for areas of professional responsibility.

In the framework of the healthcare professions management, the provision of the specific allocation in line with the macro processes of competence would allow the assumption of

responsibilities at the operational level, in a clear and defined organizational framework, with the full control of the process, and both with direct assignment of personnel and with specific budget objectives. On the other hand, the global vision of staff, generally useful for better governing the transversal processes, could be non-easily kept.

Both in the Prevention Department and in the broader context of the Local Health Authorities, the possible functional areas that require a strong management and need to ensure the correct ways of operation and delivery of in line activities can be identified in:

- check and inspection, both in work environments and on food (analogously with the models already adopted in the Lombardy Region);
- Health and Environment;
- new production plants;
- infectious diseases prophylaxis;
- oncological screening;
- health promotion;
- clinical risk management;
- authorization and accreditation of health and social-health facilities;
- quality;
- training;
- research and development;
- Prevention and Protection Service.

Furthermore, these professionals could find an allocation outside the Local Health Authorities, both in the Regional Agencies for Environmental Prevention and Protection, and in public health coordination and planning structures, such as the “Azienda Zero” (Regional Governance Body) in Operating Units dealing with training and development of health professions, or in other regional organizations (e.g. at the Human Resources Directorate or at the Prevention, Food Safety, Veterinary Directorate). The proposed set-up may include a redefinition of roles and the system of internal relations, both to increase connections among professionals and to improve performance and accountability (17,18).

Having recently witnessed a shortage of medical personnel, it is useful to highlight that some current in line positions were recently created in the personnel plans, following the conversion of medical management positions.

Furthermore, the recent Italian Ministerial Decree no. 77/2022, redefining the models and standards of territorial assistance, assigns these professionals a crucial role both in health promotion activities and in the preparation and management of health and environmental emergencies, strengthening the synergies between Bodies and Institutions (19): this is a multidisciplinary approach that allows the issue of health and environment topic to be addressed in a harmonious and sustainable way, in which these professionals could find a suitable place.

To the best of our knowledge, this is the first Italian study describing organizational considerations, useful for developing a common line of thought to improve the structure of the preventive healthcare professions within the management area. Although our

investigation refers to responses provided by voluntarily enrolled S.It.I. members, most of which coming from Northern Italy, this reasoned description can support decision makers in adopting careful placement choices for these professionals.

Conclusions

The HCWs of all areas help to ensure actions and services linked to the Essential Assistance Levels and, with reference to the prevention area, to the level of “Collective Prevention and Public Health”, whose primary contribution is essential for achieving the health objectives, also declined within the scope of the current National Prevention Plan 2020-2025 (20-22).

Over time, a deep organizational and training transformation has taken place, which has led to both the adaptation of skills and scientific evolution in the healthcare sector, and the growth in professionalizing paths developed on the axes of autonomy, competence and responsibility, also in light of the new social-assistance needs (23). Considerations on the new hypothetical organizational models are essential to promote professional growth and must continue to provide for the valorization and career development of all the healthcare professions, being a topic that represents both a challenge and an investment (24,25). The development of the healthcare profiles, of the areas of intervention and of the level of managerial and professional contribution, require a specific approach and a structured valorization of the HCWs, within an organizational model in line with today’s complexity and new health needs. It follows that, in the current panorama, it is essential to continue to consolidate the role of the manager of the preventive healthcare professions, to promote its full recognition in the current system where the organizational complexity is widely spread, providing the Local Health Authorities for an organizational set-up in diversified placements.

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References

1. Ministero della Salute. Direzione Generale della Digitalizzazione, del Sistema Informativo Sanitario e delle Statistica, Ufficio di Statistica. Personale delle A.S.L. e degli Istituti di ricovero pubblici ed equiparati. 2022.
2. Decreto Interministeriale 1 dicembre 2023, n. 1563. Ministero dell'Università e della Ricerca e Ministero della Salute. Definizione dell'ordinamento didattico del Corso di Laurea in Osteopatia ai sensi dell'articolo 7 della Legge 11 gennaio 2018, n. 3. GU Serie Generale n. 39 del 16 febbraio 2024.
3. Marcotrigiano V, Pattavina F, Blangiardi L, Salerno G, Dalena A, Del Bianco F, Di Fant M, Fabbro A, Forgiarini M, Lanzilotti C, Wachocka M, Marchet P, Mazzurana M, Rizzi R, Russo C, Salerno F, Vailati M, Stingi GD, Laurenti P, Ferro A, Cinquetti S, Napoli C. The Preventive Health Professions in Italy: The Efficient Use of Resources, Skills and Best Practice during the Pandemic. *Healthcare (Basel)*. 2022 Sep 28;10(10):1906. doi: 10.3390/healthcare10101906.
4. Decreto Ministeriale 17 gennaio 1997, n. 69. Regolamento concernente la individuazione della figura e relativo profilo professionale dell'assistente sanitario. GU Serie Generale n. 72 del 27 marzo 1997.
5. Decreto Ministeriale 17 gennaio 1997, n. 58. Regolamento concernente la individuazione della figura e relativo profilo professionale del tecnico della prevenzione nell'ambiente e nei luoghi di lavoro. GU Serie Generale n. 61 del 14 marzo 1997.
6. Legge 10 agosto 2000, n. 251. Disciplina delle professioni sanitarie infermieristiche, tecniche, della riabilitazione, della prevenzione nonché della professione ostetrica. GU Serie Generale n. 208 del 6 settembre 2000.
7. Ministero della Salute. Direzione Generale della Digitalizzazione, del Sistema Informativo Sanitario e della Statistica - Ufficio di Statistica, Direzione Generale delle Professioni sanitarie e delle Risorse Umane del SSN - Ufficio Personale del Servizio Sanitario Nazionale. Il personale del Sistema Sanitario Italiano - anno 2021. Agosto 2023.
8. Regione Puglia. Regolamento Regionale del 30 giugno 2009, n. 13. Organizzazione del Dipartimento di Prevenzione. BUR Puglia n. 101 del 6 luglio 2009.
9. Regione Veneto. Deliberazione della Giunta Regionale 16 agosto 2017, n. 1306. Linee guida per la predisposizione da parte delle aziende ed enti del SSR del nuovo atto aziendale, per l'approvazione della dotazione di strutture nell'area non ospedaliera, per l'organizzazione del Distretto, per l'organizzazione del Dipartimento di Prevenzione, per l'organizzazione del Dipartimento di Salute Mentale. BUR Veneto n. 85 del 1 settembre 2017.
10. Regione Marche. Legge Regionale del 8 agosto 2022, n. 19. Organizzazione del servizio sanitario regionale. BUR Marche n. 68 dell'11 agosto 2022.
11. Regione Autonoma Friuli Venezia Giulia. Legge Regionale del 16 ottobre 2014, n. 17. Riordino dell'assetto istituzionale e organizzativo del Servizio sanitario regionale e norme in materia di programmazione sanitaria e sociosanitaria. BUR Regione Autonoma Friuli Venezia Giulia n. 43 del 22 ottobre 2014.
12. Regione Autonoma Friuli Venezia Giulia. Legge Regionale del 17 dicembre 2018, n. 27. Assetto istituzionale e organizzativo del servizio sanitario regionale. BUR Regione Autonoma Friuli Venezia Giulia n. 51 del 19 dicembre 2018 (Suppl. Ord. n. 46).

13. Marcotrigiano V. La valorizzazione dei Professionisti della Prevenzione: Minaccia organizzativa o opportunità di miglioramento? *J Prev Med Hyg.* 2019;60: E38.
14. Wachocka M, Pattavina F, Palluzzi V, Cerabona V, Laurenti P. Health Professionals of Prevention in Italy: The Value of Expertise During COVID-19 Pandemic. *Front Public Health.* 2020 Dec 21;8:575500. doi: 10.3389/fpubh.2020.575500.
15. Dadda F, Zappi W, Zannini L. Outlining job descriptions of the health professions for preventive care: an exploratory study at the Local Health Authority of Milan, Italy. *Ann Ig.* 2014 Jul-Aug;26(4):344-54. doi: 10.7416/ai.2014.1994.
16. Decreto Legislativo 9 aprile 2008, n. 81. Attuazione dell'articolo 1 della legge 3 agosto 2007, n. 123, in materia di tutela della salute e della sicurezza nei luoghi di lavoro. GU Serie Generale n. 101 del 30 aprile 2008 (Suppl Ord n. 108).
17. Porter ME. What is value in health care? *N Engl J Med.* 2010 Dec 23;363(26):2477-81. doi: 10.1056/NEJMp1011024. Epub 2010 Dec 8.
18. Parton HB, Perlman SE, Koppaka R, Greene CM. Putting public health into practice: a model for assessing the relationship between local health departments and practicing physicians. *Am J Public Health.* 2012 Jun;102 Suppl 3(Suppl 3):S333-5. doi: 10.2105/AJPH.2011.300645.
19. Ministero della Salute. Decreto 23 maggio 2022, n. 77. Regolamento recante la definizione di modelli e standard per lo sviluppo dell'assistenza territoriale nel Servizio Sanitario Nazionale. GU Serie Generale n. 144 del 22 giugno 2022.
20. Decreto del Presidente del Consiglio dei Ministri 12 gennaio 2017. Definizione e aggiornamento dei Livelli Essenziali di Assistenza, di cui all'articolo 1, comma 7, del decreto legislativo 30 dicembre 1992, n. 502. GU Serie Generale n. 65 del 18 marzo 2017 (Suppl. Ord. n. 15).
21. Russo C, Marcotrigiano V. Assistenti sanitari e tecnici della prevenzione per la Sanità Pubblica e la Prevenzione. In: Calamo Specchia F. *Manuale Critico di Igiene e Sanità Pubblica.* Santarcangelo di Romagna (RN), Italy: Maggioli Editore; 2015: 503-508.
22. Italian Ministry of Health. General Directorate of Health Prevention. National Prevention Plan 2020-2025.
23. Mereu A, Sotgiu A, Buja A, Casuccio A, Cecconi R, Fabiani L, et al. Health Promotion Working Group of the Italian Society of Hygiene, Preventive Medicine and Public Health (SIItI). Professional competencies in health promotion and public health: what is common and what is specific? Review of the European debate and perspectives for professional development. *Epidemiol Prev.* 2015 Jul-Aug;39(4 Suppl 1):33-8.
24. Torri E, Sbrogiò LG, Rosa ED, Cinquetti S, Francia F, Ferro A. Italian Public Health Response to the COVID-19 Pandemic: Case Report from the Field, Insights and Challenges for the Department of Prevention. *Int J Environ Res Public Health.* 2020 May 22;17(10):3666. doi: 10.3390/ijerph17103666.
25. Spinazzola D. *Manuale per la gestione delle attività manageriali in Sanità.* Rome, Italy: Duepuntozero Editore; 2021. ISBN 978-8833270708.

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