



HEALTH PROMOTION

Implementing surveillance in territorial healthcare facilities: a proposal from ASST Nord Milano (Italy)

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Sir,

The SARS-CoV-2 pandemic increased pressure on the world's healthcare systems, threatening their stability and, at the same time, confirmed the importance of primary health care to guarantee effective care for patients who suffer from complex and chronic diseases. Through funding provided by the European Union to enhance the health care system in Italy the so called "Community Houses" (*Case di Comunità*) were opened and represent new organisational models of Primary Health Care [1].

Community Houses (CHs) are new entities in the Italian Healthcare System, envisaged to provide proximity care to citizens. CHs are part of the Italian National Recovery and Resilience Plan [2]. Mandatory requirements for Community houses include: the presence of a Single Access Point (PUA), home care services, and integration with General Practitioners (GPs) and Pediatricians (PLS). Recommended but not mandatory services include those related to mental health, addictions, neuropsychiatry and sports medicine, as well as screening programs and vaccinations [3].

The word "inspection" is used in several settings and denotes "critical appraisal involving examination, measurement, testing, gauging, and comparison of materials or items. An inspection determines if the material or item is in proper quantity and condition, and if it conforms to the applicable or specified requirements" [4].

Inspections are used in healthcare to promote improvements in the quality of care, promoting changes in organisational structures or processes, in healthcare provider behaviour and thereby in patient outcomes [5]. In this context, territorial healthcare facilities represent a particularly complex setting, characterized by organizational heterogeneity, ongoing structural reorganization, and the coexistence of multiple clinical and non-clinical activities. Unlike hospital settings, standardized inspection models for territorial healthcare are still limited. Therefore, the development and application of a structured inspection tool specifically designed for territorial facilities may support clinical governance, promote adherence to hygienic and organizational standards, and foster continuous quality improvement. This study aims to describe and evaluate

a structured inspection Model applied to Community Houses and other territorial healthcare facilities, and to explore its role as a tool for identifying critical issues and supporting system-level improvement actions.

In "Azienda Socio-Sanitaria Territoriale (ASST - Socio-Sanitary Territorial Authority) Nord Milano" there is a specific unit called Territorial Medical Management Unit (*Direzione Medica Territoriale*) created to guarantee the clinical governance, to plan and manage the territorial health services, to supervise hygienic and organizational conditions of territorial facilities.

On February-April 2025, a multidisciplinary staff composed of personnel working for the Territorial Medical Management Unit, and working for the Infection Prevention Service (the so called "SPIO"), carried out inspections in the healthcare facilities (except for hospitals) across the ASST Nord Milano territory, to verify multiple hygienic and organizational issues.

For these inspections the staff used a form created ad hoc for territorial facilities and created by the collaboration of several units of ASST Nord Milano (Tab. I).

The questions were divided into the following macro-categories:

1. Workers;
2. Signage;
3. Space organization;
4. Warehouse, materials and drug management;
5. Environmental hygiene;
6. Medical and urban waste;
7. Fire emergency;
8. Crash cart;
9. Decontamination, washing and sterilization processes;
10. Healthcare-associated infections (HAIs) and Pandemic Influenza Plan (PanFlu);
11. General organization.

During the inspections facilities' general conditions were observed, in particular the environmental conditions, the microclimate, the presence of bulky waste for disposal and the correct application of the internal procedures and the hygienic-sanitary conditions.

The inspection process was designed not only as a control activity but also as a formative audit aimed at promoting awareness and shared responsibility

among healthcare professionals. For this reason, nurse coordinators were asked to complete the inspection form in advance. This approach was intended to encourage the early identification and resolution of critical issues and to frame the inspection as a collaborative quality improvement process rather than a punitive assessment. For any items the answers could be: *good, improvable, not applicable*.

The inspections were performed between 14 February and 18 April 2025 (12 days of inspections) in territorial facilities placed in the ASST Nord Milano (specifically formed by the following cities: Bresso, Cormano, Cinisello Balsamo, Cologno Monzese, Cusano Milanino, Sesto S. Giovanni). Specifically the community houses have been analyzed and included also nursing clinic; blood collection center; vaccination center; outpatient clinics; doctor-on-call clinic (the so called “guardia medica”); single point of access (the so called “PUA”); family counseling clinic (the so called “consultorio familiare”); centers for mental health assistance and neuropsychiatry; centers for addictions.

In the examined time span we reported the following results:

1. Workers

The section includes two questions regarding staff identification through identification cards, clothing, garments and personal protective equipment (PPE). The average positive result for all facilities was over 95%.

2. Signage

The section includes two questions regarding information to patients through signage and indications in the facilities. The average positive result for all facilities was 62%. The signage in Community Houses and Psychosocial Centers sometimes was not totally correct, clear and visible at the entrance and on all floors (especially because of several renovations works in these facilities).

3. Space organization

The section includes eight questions regarding the destination and organization of spaces, in particular the separation of deposits for dirty and clean material, the waste room, toilets reserved for staff and patients and workers’ dining room. The average positive result for all facilities was 75%; this result was particularly influenced by the lack of workers’ dining room or refrigerators for storing workers’ meals.

4. Warehouse, materials and drug management

The section includes eight questions regarding supplies of materials and drugs, the presence and condition of dedicated cabinets and refrigerators. The average positive result for all facilities was 88%. The question regarding the presence and condition of cabinets or shelves had highest number of responses “improvable”.

5. Environmental hygiene

The section includes six questions regarding the rooms and furnishing conditions, lighting, air changes, temperature and cleaning conditions. The average positive result for all facilities was 66%. The

most critical questions were related to the conditions of the rooms and furnishings, followed by the poor order in work spaces (with a following difficulty in daily cleaning). Another issue regarded the high temperatures (especially in the summer months) reported in some facilities due to technical problems.

6. Medical and urban waste

The section includes twelve questions regarding the management of medical waste, hazardous waste, infectious waste and urban waste. The average positive result for all facilities was 88%. The questions regarding the presence of the sign on the doors of temporary waste storage facilities and the one on separate waste collection had highest number of responses “improvable”.

7. Fire emergency

The section includes seven questions regarding the management of fire emergencies. The average positive result for all facilities was 79%. The questions regarding the dissemination of the emergency and evacuation plan, the one related to the presence of no smoking signs, and the one on the storage of flammable products had highest number of responses “improvable”.

8. Crash cart

The section includes eleven questions regarding the management of aspects related to the territorial clinical emergency. The average positive result for all facilities was 91%. The questions regarding the quality of crash carts, the one on the signage relating to the crash carts and the one on the knowledge of the methods of reporting events had highest number of responses “improvable”.

9. Decontamination, washing and sterilization processes

The section includes two questions regarding the decontamination, washing and sterilization phases and the average positive result for all facilities was 100%.

10. Healthcare-associated infections (HAIs) and Pandemic Influenza Plan (PanFlu)

The section includes two questions regarding the prevention of healthcare-associated infections (HAI) and the pandemic influenza plan (PANFLU) and the average positive result for all facilities was 89%. In some waiting rooms a lack of hand sanitizer gel was reported and some sinks didn’t have soap and paper towels.

11. General organization

The section includes two questions regarding the forms for reporting adverse events and the ease of finding documentation on JDOC (internal platform for storing procedures and documents). The average positive result for all facilities was 81%.

After the inspections, the coordinators received inspections’ reports with the identified critical issues and the suggested improvement actions.

Among the critical issues identified during the inspections, some have been considered “urgent” and required an immediate intervention.

A task force involving several units (technical service,

Tab. I. Form used during inspections.

Workers
Are internal and external workers identifiable by an identification badge?
Are workers' clothing, garments and PPE suitable and correctly worn?
Signage
Are the signage correct, clear and visible at the entrance and on all floors?
Is there appropriate signage to inform patients about the hours of services and access to the facilities?
Space organization
Are there dedicated spaces for storing clean material?
Are there dedicated spaces for storing dirty material?
Are there dedicated spaces or cabinets for storing materials, equipment and instruments?
Is medical waste stored in a suitable location?
Are there toilets for staff, separate from those for users?
Are there disabled-friendly toilets?
Is there a dining room for workers? If so, is it kept clean and tidy?
Is there a refrigerator used exclusively for food? Is it marked "for food"?
Warehouse, materials and drug management
Are there cabinets/shelves dedicated to drug/material supplies and in good condition?
Are there clean uniforms and gowns and PPE (gloves/masks, <i>etc.</i>) in stock available for staff?
Is the cleaned material well kept and tidy?
Is the dirty material orderly stored?
Are there expired drugs or devices?
Is the medicine refrigerator in good condition?
Is there a temperature detection system in the refrigerator with daily recording?
Is there the anti-spill kit and is the related procedure known to the operators?
Environmental hygiene
Are the premises and furnishings in good condition?
Is there an adequate lighting in all rooms and outdoor spaces?
Are air changes ensured in all confined spaces (waiting rooms, clinics, corridors, <i>etc.</i>)?
Is the environmental temperature controlled and maintained at adequate values: in winter 19-22°C; in summer 24-26°C?
Are spaces in good general hygiene conditions?
Are countertops, surfaces, and furnishings neat and clear enough to allow for daily cleaning?
Medical and urban waste
Are the containers for hazardous infectious medical waste for sharps and needles (yellow rigid plastic containers) used properly? Check that there are no drugs in vials, syringe caps, cotton wool, <i>etc.</i>
Are the sharps containers, filled to no more than 3/4 of their volume and hermetically sealed, placed inside the appropriate cardboard containers with the bag for infectious waste (yellow) inside, for disposal?
Are containers for hazardous infectious medical waste (white and yellow cardboard container with a special yellow bag inside) used correctly? Check for the absence of non-infectious urban waste, such as glasses, cotton, urine containers, diapers.
Are cardboard containers closed when they reach no more than 2/3 of their volume and no more than approximately 5 kg in weight (value refers to 60 L containers)?
Are potentially infectious medical waste containers intact and free of spills/tears?
Do closed cardboard containers show: company name, structure and closing date?
Are closed cardboard containers transported directly to the temporary storage facility, without intermediate steps? Make sure they are not left unattended in the aisles until the operators in charge pass by.
Is the temporary storage room for hazardous infectious medical waste marked with a sign on the door and warning signs? Is it accessible only to operators and locked? Is it used exclusively for this purpose?
Is the documentation (register and 4 copies of the completed form with the weight) archived and kept for the time required by law?
Is the collection of solid urban waste carried out correctly? Are there containers for separate waste collection? Are they disposed of correctly?
Is municipal waste properly stored before disposal (e.g. in bins awaiting collection day)?
Are there unused/discarded medical devices, furniture and materials waiting to be disposed of?
Fire emergency
Is the smoking ban respected? Are there signs indicating the smoking area and the prohibition in all identified internal and external points?
Are flammable products properly stored and protected?
Are the emergency routes and exits well identified, signalled and perfectly clear of materials/obstacles and openable?
Are emergency signs present and clearly visible?

Tab. I (follows).

Are the REI doors held open with systems that allow automatic closing in the event of fire/Are the REI doors working? Check that there are no blocks such as wedges under the doors to keep them open.
Are fire extinguishers easily visible and usable?
Has the emergency and evacuation plan been printed and available to all staff? Have meetings been organised to disseminate the plan? Has a list of operators been prepared with the date of participation in the meeting and signature?
Crash cart
Is there a crash cart?
Is the crash cart neat, clean and well organized?
Is the crash cart sealed, updated and accessible?
Are there in the crash cart all the medicines and supplies required by the internal procedure?
Are the expiration dates of the drugs and crash cart supplies periodically checked?
Is the AED charged and functioning?
Are there signs indicating the location of the crash cart and the AED, visible and updated on all floors of the building?
Is there the "crash cart and defibrillator station" sign, and well visible on the door?
Are the following checked periodically: the integrity and expiry of the plates; the pressure of the O2 cylinders?
Are the crash cart and AED used by different services/units? Is there coordination for their control?
Does the staff know and can find the forms for reporting emergency/urgent events?
Decontamination, washing and sterilization processes
Verify the correct management of the decontamination and sterilization process phases
Are the attachments for decontamination and sterilization completed?
Healthcare-associated infections (HAIs) and Pandemic Influenza Plan (PanFlu)
Are there indications for proper hand hygiene near the sinks?
Are there soap and paper towels near the sinks?
Is there hydroalcoholic gel and possibly a column at the assistance points and waiting rooms?
Regarding the prevention of legionellosis, are the flushing forms kept by the nursing staff and correctly filled out by the operators in charge?
Have the PAN-FLU plan and the Health Directorate's recommendations for the prevention of respiratory syndromes regarding the use of masks and hand hygiene been disseminated to all operators?
Are masks available for operators to wear according to the recommendations of the health management?
Are checks carried out to ensure that patients and their companions wear masks in case of respiratory symptoms, according to the recommendations of the health management?
General organization
Does the staff know and is able to find the forms for reporting adverse events/non-compliance?
Are operators able to find documentation on the intranet and on JDOC (the electronic data warehouse storing procedures and documentation)?

clinical engineering, communication, risk management, infection prevention service, nursing management unit, territorial medical management unit, *etc.*) was activated to ensure the implementation of these actions within certain deadlines. Each unit received a complete list of interventions to be carried out in the territorial structures and the deadline to complete the interventions.

Overall, the inspection results highlighted a heterogeneous level of compliance across different domains. Higher levels of compliance were observed in areas related to staff identification, emergency equipment management, and decontamination processes, while lower scores were mainly related to signage, environmental hygiene, and space organization. These critical areas were often associated with structural constraints, ongoing renovation activities, or organizational factors rather than with a lack of procedural knowledge. Several issues were considered easily correctable through targeted organizational interventions.

The findings of this study suggest that structured inspections in territorial healthcare facilities can effectively identify organizational and hygienic

criticalities and the lower compliance observed in areas such as signage, environmental hygiene, and space organization reflects the intrinsic complexity of Community Houses, where multiple services coexist and structural adaptations are often ongoing. These results underline the need for inspection models specifically tailored to territorial settings, rather than directly derived from hospital-based frameworks.

Beyond the identification of critical issues, the inspection process described in this study contributed to the activation of concrete improvement actions. The classification of findings according to urgency allowed the prioritization of interventions and led to the activation of a multidisciplinary task force involving technical, clinical, and managerial units. This structured follow-up transformed the inspection from a descriptive assessment into an operational tool for system improvement, supporting decision-making processes and the implementation of corrective actions within defined timelines.

From a governance perspective, this experience highlights the potential role of territorial inspections as a

strategic tool to support clinical governance and quality improvement in primary care settings. The proposed inspection Model is adaptable and may be replicated in other territorial healthcare systems undergoing similar organizational transformations. By fostering collaboration among professionals and promoting a shared culture of quality and safety, inspections may contribute to strengthening the resilience and effectiveness of territorial healthcare services.

This preliminary study demonstrates that a structured and participatory inspection Model can support the identification of organizational and hygienic critical issues in territorial healthcare facilities. When integrated into a broader governance framework, inspections may act as a catalyst for targeted improvement actions and interdepartmental collaboration. Although further studies are needed to evaluate long-term outcomes, this approach represents a feasible and replicable strategy to promote continuous quality improvement in primary and community-based healthcare settings.

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Conflict of Interest Statement

No one to declare.

Authors' Contribution

VM, GT: contributed to the study conception and design. VM, LP: coordinated the inspection activities and data acquisition. LP, GT: contributed to data analysis and interpretation. GT: drafted the manuscript. BM, TR: supervised the study and revised the manuscript.

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