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Original article

Application of the failure mode, effects and criticality analysis in prison to improve safety and mental health

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Abstract. *Background and aim:* Admission to a correctional facility represents a critical phase requiring immediate healthcare attention, with a specific focus on mental health. Inmates show a significantly higher prevalence of psychiatric disorders compared to the general population, and the prison environment may worsen pre-existing conditions or contribute to the onset of new psychological issues. Italian regulations require a clinical assessment at intake, including screening for suicide risk. However, early identification of mental disorders and access to adequate care remain critical challenges. *Materials and Methods:* This study analyzed the healthcare intake process in an Italian correctional facility using the Failure Mode, Effects, and Criticality Analysis (FMECA). A multidisciplinary working group divided the process into seven operational phases, identifying 34 Failure Modes (FM). Each FM was assigned a Risk Priority Index (RPI) to identify critical areas and define possible improvement strategies. *Results:* The most critical phases were "*Request for tests and specialist consultations*" and "*Collection of medical and personal history*". Major contributing factors included organizational inefficiencies, language barriers, delays in psychiatric evaluations, and failure to report psychological symptoms. *Conclusions:* Three key corrective actions were identified: implementing standardized checklists, multilingual medical documentation, and staff training in managing psychological distress. (www.actabiomedica.it)

Key words: prison, suicide, risk, mental health, nurse

Background

Entering a prison facility represents a critical moment characterized by organizational complexities and significant health implications. This process involves individuals experiencing detention for the first time and those transferred from other institutions. In Italy, it is regulated by Article 11 of the prison system regulations, Law No. 354, July 26, 1975 (1). The law mandates that every inmate, upon arrival, undergoes a general medical examination to identify any physical or mental conditions requiring immediate medical intervention. The importance of this phase was further reinforced by the 2008 reform (2), which transferred the management of prison healthcare to the National Health Service (SSN). This transition facilitated a more integrated approach to inmate health care, ensuring a more timely and multidisciplinary response. The initial medical examination, ideally conducted by a multidisciplinary team of doctors and nurses, is described in international literature under various terms, including initial medical screening, initial medical assessment, and initial health intake screening (3). Guidelines from NICE, National Institute for Health and Care Excellence (4), emphasize the importance of conducting this assessment promptly and thoroughly

to prevent physical or mental health conditions from remaining undiagnosed and untreated during detention. One of the most critical aspects of this phase is the assessment of suicide risk (5). According to World Health Organization (WHO) statistics (6), suicide in prison represents a significant issue, with rates substantially higher than those in the general population. These figures highlight a critical concern requiring proactive measures to protect inmates' mental and physical health. Although the impact of incarceration on mental health disorders is significant, numerous studies indicate low identification and treatment rates, underscoring the urgent need for effective prevention strategies (7). Adverse events and challenges during the initial intake phase can stem from organizational errors, omissions, or a lack of standardized protocols. Key risk factors include the shortage of interpreters for foreign inmates, hindering medical history collection and early recognition of psychiatric disorders; incomplete medical documentation, which disrupts continuity of care; and inadequate staff training, affecting the ability to identify high-risk individuals early (8). In this context, clinical risk management is strategically based on a "*risk culture*" that views errors as indicators of systemic weaknesses rather than individual failures. This approach, theorized by Reason (9), focuses on identifying and mitigating latent errors in work processes to prevent adverse events and improve overall safety. Among clinical risk management tools, Failure Mode and Critical Effect Analysis (FMECA) has emerged as a particularly effective proactive methodology (10). As highlighted by Liu (11), this tool enables a systematic analysis of healthcare processes, identifying critical issues and implementing corrective measures before incidents occur. Previous research, such as studies conducted by Bagnasco et al. (12) in the Pediatric Emergency Department and by Francesconi et al. (13) in emergency rooms, has demonstrated the effectiveness of the FMECA method in reducing adverse events and improving care quality. This approach has proven helpful in various healthcare settings for identifying high-priority events that, although rare, could have significant consequences (10). Although the application of the FMECA method in prison facilities is less documented than in healthcare settings, the principles of this methodology can be adapted to enhance the safety of care within detention institutions. A proactive analysis of potential failure modes and their consequences allow for better-managing risks related to inadequate inmate intake procedures. From this perspective, the FMECA method was chosen to examine the risks associated with the inmate intake process in an Italian correctional facility. This approach aims to identify key challenges and develop preventive measures to improve the safety and efficiency of healthcare services for new arrivals.

Methods

This study applied the FMECA methodology to analyze the inmate intake process in an Italian correctional facility and identify key critical issues related to clinical risk management, focusing on mental health. The analysis was conducted in a "*Casa di Reclusione*" in Tuscany, an Italian correctional facility designated for inmates serving final sentences. These correctional institutions primarily accommodate individuals sentenced to medium- or long-term imprisonment and are oriented toward rehabilitation and social reintegration through individualized treatment programs. The analysis was conducted between April and July 2024 by a multidisciplinary Working Group consisting of two doctors, one nursing coordinator, five nurses, and one psychologist, ensuring a thorough and integrated evaluation of the identified issues. The intake process was divided into seven operational phases, from initial registration to clinical monitoring. Failure Modes (FM) – i.e., failure mechanisms that could compromise the safety and effectiveness of healthcare services – were identified for each phase.

For each identified FM, the Risk Priority Index (RPI) was calculated by multiplying three factors:

- Severity of the event (S);
- Probability of occurrence (O);
- Detection probability (D).

The classification of FM was determined through the multidisciplinary Working Group, using a scale from 1 to 10 for each factor, according to the standard FMECA methodology criteria. Critical issues with

the highest RPI were prioritized for implementing corrective measures. The analysis particularly focused on risks related to failure to identify psychiatric conditions, delays in specialist consultations, language barriers, and inadequate staff training. Based on the findings, three improvement strategies were developed and proposed to reduce clinical risk:

- Implementation of standardized checklists for initial medical assessments;
- Multilingual translation of medical documentation to improve communication with foreign inmates;
- Enhanced training for healthcare staff to facilitate the early identification of psychological distress.

The project's first phase involved a comprehensive review of national and international literature regarding medical examinations and intake protocols for inmates upon entry into prison. This preliminary analysis allowed for the collection of necessary evidence to inform decision-making and adapt best practices to the specific context of the institution. Subsequently, the Working Group implemented the various steps of the FMECA methodology (Failure Mode and Critical Effect Analysis). This approach enabled a systematic analysis of the inmate intake process, identifying potential failure modes, evaluating associated effects, and classifying the severity of each identified risk. These steps formed the foundation for the planning and implementation of targeted interventions to reduce clinical risk.

Step 1: identification of process phases

The first step, admitting a newly arrived inmate upon their initial entry into the correctional facility, was described (Table 1). The working group analyzed the process from both an assistance and organizational perspective. The identified phases were "*Inmate reception*", "*Privacy consent collection*", "*Collection and recording of personal and medical history data*","*Physical examination*", "*Request for tests and specialist consultations, prescription of therapy*", "*Therapeutic pathway*" and "*Monitoring*". Once the intake process was described, the analysis examined the specific activities within each phase.

Step 2: analysis of activities and identification of failure modes (FM)

Each activity involved in the process was analyzed to identify potential critical issues and error modes, technically defined as FM. This phase was essential to outline possible malfunction scenarios that could negatively impact the effectiveness and safety of the inmate intake procedures.

Step 3: assessment of effects, causes, and control barriers

For each identified FM, the effects that could result, the underlying causes, and the existing control barriers to prevent such errors were analyzed. These barriers include tools such as double-checking procedures, operational checklists, specific staff training, standardized protocols, and procedures. This analysis allowed for the mapping of the system's strengths and weaknesses.

Step 4: calculation of the risk priority index (RPI)

Using the RPI, a numerical value was assigned to each FM to establish a priority ranking for intervention. The RPI serves as a critical risk assessment indicator, helping identify the most severe or high-impact failure modes. Table 2 shows an example of FMECA analysis applied to the inmate reception phase.

Risk Priority Index (RPI) methodology

The RPI is calculated as the product of three factors: Severity (S), Occurrence (O), and Detection (D). The "*severity*" and "*probability*" factors were rated on a scale from 1 to 10, while "*detectability*" was assigned on an inverse scale from 10 to 1, as recommended by the relevant literature (14). In this case, a high detectability score indicates greater difficulty detecting an error or failure, thus increasing its criticality. The final RPI score is obtained by multiplying the three values (S x O x D), resulting in an overall score ranging from 1 to 1000. The identified issues were analyzed according to the NICE guidelines (4). High-scoring failure modes, which represent the system's most fragile points, were used to define intervention priorities, with the goal of implementing targeted and effective corrective actions (Table 3).

Table 1. Phases of the intake process for newly arrived inmates.

Phase A - Inmate reception	Physical reception Delivery of informational brochures
Phase B - Privacy consent collection	Inmate's signature for the processing of personal data, general consent to medical treatment, and execution of the HIV test
Phase C - Collection and recording of personal and medical history data	Inmate registration in the electronic medical record Collection of medical history data Assessment of any reported physical assaults Evaluation of previous medical documentation (if newly arrived from another institution) Verification of symptoms related to drug and alcohol intoxication Assessment of substance dependence Preliminary psychiatric examination to identify possible mental disorders and assess suicide risk Evaluation of vaccination status Review of laboratory tests (blood tests and ECG)
Phase D - Physical examination	Measurement of body weight and height Measurement of blood pressure, heart rate, oxygen saturation, and temperature Skin examination Pharyngeal examination Chest auscultation Heart auscultation Palpation of the abdomen and renal areas
Phase E - Request for tests and specialist consultations, prescription of therapy	Completion of laboratory tests, instrumental exams, and specialist consultation requests on prescription forms to assess inmates' health conditions Prescription of intradermal Mantoux test Prescription of tetanus vaccination Request for ECG if not available or performed more than 3 months ago Prescription of therapy in a unified electronic therapy record
Phase F - Therapeutic pathway	Organization and/or administration of vaccinations Execution of the Mantoux test Scheduling of laboratory tests Execution and reporting of ECG Scheduling of psychiatric consultation Scheduling of psychological consultation Scheduling of any necessary specialist consultations Administration of therapy
Phase G - Monitoring	Follow-up visits Completion of vaccinations

Step 5: compilation of the master list and planning of corrective actions

Once the RPI values were calculated for each FM, a Master List was created, listing all failure modes in descending order of risk priority. This list enabled the rapid identification of the most critical FM, highlighting areas of the process that required urgent intervention. Based on these priorities, the next step involved identifying and thoroughly analyzing the potential causes of adverse events associated with FM with the highest RPI. Subsequently, targeted corrective actions were planned to eliminate or minimize risk. An implementation plan for each intervention was developed, including the timeframe for execution and performance indicators to monitor and evaluate the effectiveness of corrective actions over time. This approach allowed for structuring a precise action plan aimed at risk reduction, improving process safety, and optimizing the management of identified critical issues.

The analysis of the process phases was carried out using an integrated approach that included

Table 2. Example of FMECA analysis.

Phase	Activity	FM	Effects	Causes	Barriers	S	O	D	RPI
A	Delivery of Informational Brochure	Failure to deliver the brochure	Lack of information provided to the detainee regarding the rules and functioning of healthcare services in prison	Oversight by the healthcare worker The brochure is not available in the detainee's language Refusal by the detainee	Proper communication between staff and detainee Availability of brochures written in the most common languages	7	6	8	336
A	Preparation of Medical Record	Failure to send the medical record from the previous facility (including the absence of some relevant documents)	Delayed clinical assessment of the detainee, uncertainty about vaccinations received, uncertainty about clinical and therapeutic needs	Oversight by staff from the previous facility	Contact with the previous facility	8	3	3	72

Table 3. Numerical scales used for the assignment of the priority index.

Severity (S) *That is the extent of the potential damage suffered.*		**Occurrence (O)** *That is, the frequency with which the error may occur*		**Detection (D)** *That is, the likelihood that the existing barriers can detect the error*	
Very Low	1	Remote	1	Remote	9-10
Low	2-3	Low	2-3	Low	7-8
Moderate	4-6	Moderate	4-6	Moderate	4-6
Hight	7-8	Hight	7-8	Hight	2-3
Very Hight	9-10	Very Hight	9-10	Very Hight	1

direct on-site observation during inmate admission and document analysis of protocols. The multidisciplinary Working Group, composed of professionals who have been working in the facility for over one year, conducted data collection and evaluation activities to ensure a thorough analysis grounded in clinical practice.

Results

34 Failure Modes (FMs) were identified during the FMECA of the healthcare intake process, with a cumulative Risk Priority Index (RPI) of 6426. This aggregate RPI value represents the overall risk level associated with the entire intake process, calculated

Table 4. Total RPI values per phase.

Phases of the intake process for newly arrived inmates	Total RPI
Phase A - Inmate reception	**508**
Phase B - Privacy consent collection	**81**
Phase C - Collection and recording of personal and medical history data	**1355**
Phase D - Physical examination	**180**
Phase E - Request for tests and specialist consultations, prescription of therapy	**1540**
Phase F - Therapeutic pathway	**1451**
Phase G - Monitoring	**1311**

by summing the individual RPI scores of each failure mode across all operational phases. Table 4 shows a summary of the total RPI values per phase. The data indicate that Phases C, E, and F are the most critical points within the intake process.

Phase A – Inmate reception

One of the most significant FM identified was the "*failure to deliver the informational brochure*" (RPI =336). While this may seem like a purely organizational issue, its consequences can be substantial, including the inmate's lack of awareness regarding the prison healthcare services and operational rules, potentially leading to delays in medical care or misunderstandings about available services.

Phase B – Privacy consent collection

In this phase, a single FM was identified: the "*failure to collect privacy/treatment consent*" (RPI = 81). In this case, the main causes were related to episodes of forgetfulness, often due to the simultaneous management of other tasks.

Phase C – Collection and recording of personal and medical history data

Among the identified FM, one of the most critical was the "*superficial psychiatric evaluation*" (RPI = 300) , which is associated with the delayed recognition of suicide risk and inadequate risk management, leading to delayed interventions.

Phase D – Physical examination

A key FM in this phase was the "*failure to record or document vital parameters and morphological indices such as weight and height*" (RPI =108). This issue was linked to the delayed clinical assessment of the inmate, potentially affecting the timeliness and adequacy of medical interventions. Another critical factor identified was some inmates' non-compliant or agitated behavior, particularly during the initial medical assessment, which can hinder the proper execution of the examination. Additionally, the intake medical exam often involves multiple healthcare providers and requires the presence of a correctional officer, further emphasizing the complexity of the operational context.

Phase E – Request for tests and specialist consultations, prescription of therapy

In this phase, a significant FM was identified as the "*failure to schedule appointments with a psychologist or psychiatrist*" (RPI = 560). This issue represents a serious risk of delayed verification of ongoing medical prescriptions and the failure to assess inmates with self-harm or suicidal thoughts promptly. The issue is particularly relevant in cases where inmates appear outwardly calm, creating the false impression that they are not at risk. The absence or incompleteness of previous medical documentation further compounds it. The intake medical examination includes a validated suicide risk assessment scale to support the proper evaluation of inmates entering the facility.

Phase F – Therapeutic pathway

The inmate's failure to adhere to the vaccination program, particularly regarding the tetanus vaccine, was the FM that received the highest score in the "*Therapeutic Pathway*" phase (RPI = 360). This issue poses a significant health risk, such as exposure to preventable infections, and may limit the inmate's access to essential activities, including participation in communal life and sports programs. The leading causes

include the lack of updated medical documentation, oversights by healthcare staff, and the inmates refusing vaccination.

Phase G – Monitoring

During the follow-up visits phase, a FM was identified concerning the issue of missing follow-up appointments (RPI =315). This issue leads to delays in health monitoring, increasing the risk of failing to address worsening health conditions promptly. The primary causes of this issue include oversight and poor planning, making it challenging to ensure the regularity of follow-up medical visits. The operational phase analysis allowed for identifying numerous failure modes and their respective RPIs, highlighting the main criticalities of the intake process. The detailed results are presented below. A detailed analysis of the underlying causes of FM identified 58 risk factors, which can be classified into five main categories:

- Forgetfulness/inattention: Procedural errors and lack of verification in recording health data.
- Organizational issues: Absence of standardized protocols and inefficiencies in operational workflows.
- Collaboration and inmate behavior: Difficulties involving inmates actively in healthcare pathways.
- Technical and informational deficiencies: Lack of adequate tools for collecting and managing health information.
- Other factors: Language barriers and difficulties in accessing specialist resources.

Discussion

The Failure Mode and Critical Effects Analysis (FMECA) is widely recognized as an effective tool for healthcare risk management. This method has proven highly practical in improving quality and reducing errors in hospital healthcare processes, supporting professionals and researchers in adopting strategies to enhance patient safety (15). The application of the FMECA to the prison healthcare intake process has revealed multiple systemic vulnerabilities, especially in key phases such as the collection and recording of personal and medical history data (Phase C), the request for tests and specialist consultations, the prescription of therapy (Phase E), and the therapeutic pathway (Phase F). These phases presented the highest cumulative RPI scores, highlighting them as critical targets for preventive action. One of the most significant findings relates to the "*superficial psychiatric evaluation*" (RPI = 300) in phase C, a failure mode with severe implications for the identification and timely management of suicide risk. This aligns with existing literature emphasizing that psychiatric conditions and suicide ideation are among the strongest predictors of prison suicide (17). The fact that this issue persists despite the presence of validated suicide risk assessment tools suggests not only implementation gaps but also a broader systemic issue in clinical prioritization and workflow adherence. The missing follow-up appointments (RPI = 315) also illustrate a systemic weakness in monitoring and chronic care management. Given the cumulative risk profile of inmates, often burdened by comorbidities and complex psychosocial needs, missed follow-ups can lead to clinical deterioration that is both avoidable and costly. From an operational standpoint, many of the identified FM stem from organizational inefficiencies and staff inattention, such as the failure to deliver informational brochures (RPI = 336) or omissions in recording vital signs. These may seem minor, yet they have cascading consequences for patient engagement, informed consent, and subsequent care decisions. Classifying contributing risk factors into five major categories—forgetfulness, organizational lapses, and technical barriers—offers a valuable framework for targeted intervention. Notably, language barriers and behavioral challenges were recurring themes, underscoring the need for culturally and psychologically competent care models. This suggests that staff training should focus on clinical procedures, de-escalation techniques, trauma-informed care, and cross-cultural communication. Based on the identified critical issues, three main corrective strategies were proposed:

1. Implement standardized checklists to ensure more complete and uniform data collection during the intake phase.
2. Multilingual translation of medical documentation to improve communication with foreign inmates and reduce the risk of anamnesis errors.
3. Healthcare staff training on managing psychological distress and early recognition of warning signs related to suicide risk.

These measures aim to optimize the inmate healthcare intake process and reduce the risk of adverse events with a multidisciplinary approach focused on prevention and clinical safety. One of the primary interventions implemented is adopting a standardized checklist for initial medical intake to ensure a more comprehensive medical history and a more effective management of inmates' healthcare needs. This tool includes the measurement and recording of vital signs (blood pressure, heart rate, temperature), calculation of weight and height, Mantoux test execution, availability verification of updated electrocardiograms, prescription of laboratory tests, vaccination status assessment, and scheduling of psychiatric and psychological evaluations. Using checklists is a well-established healthcare strategy and has been proven effective in reducing surgical mortality (16).

In the prison setting, similar tools could improve the efficiency of initial medical visits, which aligns with the international recommendations of the National Institute for Health and Care Excellence (4). This intervention will be monitored quarterly, allowing for continuous assessment of its effectiveness and identifying critical areas that require further improvements. A particularly relevant aspect that emerged from the analysis concerns the suicide risk among inmates, which is significantly higher than in the general population. According to WHO data, the prison suicide rate is up to 13 times higher than in the general population, making monitoring and prevention a top priority. Recent studies have identified several modifiable risk factors, including a psychiatric diagnosis, suicidal ideation during detention, and specific institutional conditions, highlighting the need for targeted interventions to reduce such events (17). Improving access to mental health services and adopting more effective surveillance strategies could significantly reduce the risk of suicide in prison. To address this issue, a new healthcare intake protocol has been proposed, along with enhancing the skills of healthcare workers and prison staff. The goal is to equip staff with the necessary tools to promptly identify and report warning signs of suicide risk among inmates. Staff training plays a crucial role in ensuring the effectiveness of this strategy, improving collaboration among different professionals, and reinforcing preventive monitoring. According to several studies, risk factors such as a prior psychiatric diagnosis and suicidal ideation during detention are strongly associated with prison suicide, emphasizing the need to adopt evidence-based interventions to improve access to mental healthcare (7). Another implemented intervention concerns the continuous training of healthcare and prison staff. Regular meetings will be dedicated to suicide risk management, initial inmate monitoring, and the use of standardized tools such as the checklist. Strengthening personnel skills, especially in recognizing vulnerability factors such as neurodisabilities and mood disorders, could promote a more empathetic approach to inmate management (18). The interaction between nurses and inmates is fundamental to inmates' psychological well-being. A trust-based relationship, where inmates feel respected and acknowledged as individuals, can help create a supportive environment that contributes to reducing suicide risk (19). The practical implementation of FMECA in healthcare settings requires the engagement of the entire multidisciplinary team, ensuring comprehensive analysis and effective communication among all staff members—critical factors in prison healthcare, where reducing misunderstandings and improving decision-making processes are essential (20). Finally, a revision of the inmate informational brochure has been proposed. This tool should provide clear information on healthcare procedures, inmate medical rights and responsibilities, and the opportunities offered by the prison healthcare system. Staff have identified language barriers as one of the main causes of service disruptions and misunderstandings, limiting access to healthcare for foreign inmates. Introducing translated brochures in the most common languages represents a key strategy to improve communication,

reduce anamnesis errors, and ensure equal and accessible healthcare for all inmates.

These actions, integrated into a structured improvement plan, have the potential to transform prison healthcare management, ensuring timely and appropriate medical care for all inmates, enhancing overall safety, and reducing the risk of adverse events.

Limitations

The FMECA methodology has proven to be a valuable tool for clinical risk analysis, thanks to its systematic and proactive approach, which allows for identifying, assessing, and prioritizing risks in healthcare processes. However, it also presents some limitations that could affect the reliability and reproducibility of the results. One of the main limitations concerns subjectivity in evaluating Failure Modes and assigning Risk Priority Index scores. The classification of risks depends on experience, individual perceptions, and the composition of the working group, which can introduce assessment biases and influence the objectivity of the analysis. The lack of a standardized method for weighing risk factors could lead to variations in results among different analysis groups, limiting the reproducibility of the study. Another critical issue of this methodology is its focus on known or predictable risks, which may limit its ability to identify unexpected or emerging adverse events, especially in a dynamic and complex environment like prison settings. The analysis is based on existing processes and expected criticalities, while unexpected events, such as health emergencies or sudden changes in detention conditions, may not be adequately considered. Lastly, applying this methodology to a single correctional facility limits the generalizability of the results. The analyzed context may not fully represent other detention facilities with different resources, healthcare protocols, and staff organization. Future studies could expand the sample, including multiple prisons, to better understand healthcare issues in correctional settings. Despite these limitations, if applied with methodological rigor, integrating strategies to mitigate biases (such as cross-validation of data among different expert groups) and combining it with other risk analysis tools, the FMECA methodology can provide a significant contribution to improving safety and optimizing healthcare processes, even in complex environments like prisons.

Ethical considerations

The study was conducted in accordance with the ethical guidelines set forth in the Declaration of Helsinki, the Italian Privacy Law (Legislative Decree No. 196/2003), and the EU General Data Protection Regulation (GDPR 2016/679). All inmates, during the initial intake observation visit, sign an informed consent form and authorize the processing of their personal data in accordance with applicable regulations. Nevertheless, for the purposes of this study, no data were collected from inmates, nor were any interventions carried out that could impact their health status. The analysis was strictly limited to identifying potential risk areas without implementing specific clinical interventions and was based solely on procedural and workflow observations.

Conclusions

The critical issues identified through the FMECA method analysis highlight the need for a structured and multidisciplinary approach in the initial management of inmates. The planned interventions, including adopting a standardized checklist, creating an intake protocol, strengthening staff competencies, and revising the informational brochure, represent a targeted and effective improvement plan. These actions aim to ensure a more uniform and safe intake process, aligned with international best practices, with particular attention to monitoring inmates' physical and mental health conditions. The primary objective is to improve the quality of prison healthcare, reduce the risk of adverse events, and promote a safer environment for inmates and healthcare professionals. A key factor for the success of this plan is continuous training and awareness-raising among staff, essential for ensuring the effectiveness of interventions and addressing complex issues such as suicide risk. Only through effective collaboration among all professionals and the implementation of appropriate operational

tools will it be possible to ensure timely and appropriate inmate healthcare management. Adopting multilingual informational materials also addresses the need to overcome language barriers, improving access to healthcare services for a heterogeneous and vulnerable population. With constant monitoring and a proactive approach, these actions can transform prison healthcare management, promoting a more equitable, safe, and efficient system.

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g., consultancies, stock ownership, equity interest, patent/ licensing arrangement, etc.) that might pose a conflict of interest in connection with the submitted article.

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