



Exploring the Medical Screening Process of Fire Officer 1 Applicants in the Bureau of Fire Protection in Region 5

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ABSTRACT

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Republic Act No. 9263 sought to enhance the professionalism and effectiveness of the BFP and BJMP by ensuring that their personnel are well-qualified, adequately compensated, and provided with opportunities for career advancement. The study aims to explore the medical screening process experience of Fire Officer 1 applicant in the Bureau of Fire Protection Regional Office V and identify potential problems in terms of medical requirements and implementation. The research study utilizes a qualitative method, including documentary and thematic analysis.

The study's respondents are the recently hired FO1s and medical staff of the BFP Region 5. The findings revealed inadequate medical test requirements and medical procedures in the medical screening process. The potential problems regarding medical requirements are errors in medical evaluation, the authenticity of medical results, and issues in acquiring clearances. In terms of medical



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implementation, requiring various medical clearances, and misplaced medical results are its problems. As a result, the medical screening process is hindered by both insufficient test requirements and flawed procedures. This leads to inaccurate evaluations, questionable result authenticity, difficulties obtaining clearances, and logistical implementation issues.

INTRODUCTION

Maintaining good health is essential for individual well-being and community health results, considerably influenced by life choices, access to medical care, and preventive measures. Lifestyle choices such as food, physical activity, and consumption of substances considerably affect health. In addition, access to medical care plays a crucial role in health promotion (Wang et al., 2024). Likewise, Lifestyle choices significantly affect overall health, influencing the prevalence of chronic diseases and the effectiveness of management strategies. Healthy behaviors such as regular physical activity, balanced nutrition, and harmful substance abstention contribute to better health results (Obeagu & Akinleye, 2024).

The Republic Act number 9263, also known as the BFP and BJMP Professionalization Act of 2004, the BFP qualifications were upgraded in coordination with the Civil Service Commission (CSC) and the Commission on Higher Education (CHED) as the basis of appointment and expressly indicated that all applicants must successfully pass Medical/Dental and Physical Examination set forth by the BFP. Thus, the study on the Medical Screening Process of FO1 in the BFP Region 5 will help the organization to assess the status of the existing guidelines and other implemented innovations in line with the rules and regulations of the BFP's Standard Operating Procedures in medical screening and to further explore the experiences of the FO1 during their medical screening to be able to identify existing and potential problems to create policies or recommendations for the implementation of various measures, criteria or even the possibilities of provision of facilities, if necessary, to come up with the proactive medical screening and evaluation during the recruitment processes during the recruitment phase to identify any underlying health issues early on or the best practices in choosing the most qualified applicants. The BFP is compelled to review and reform its medical screening procedures to prevent similar tragedies in the future. It will assess the alignment of these screening measures with the job demands and scrutinize their effectiveness in identifying and mitigating potential health-related risks among trainees.

FRAMEWORK

This study employs Human Capital Theory, Contract Theory, and Institutional Theory to analyze the medical screening process for Fire Officer 1 applicants in the Bureau of Fire Protection. Human Capital Theory (Auerbach & Green, 2024) emphasizes the necessity of an applicant's health as a crucial asset for productivity in the demanding role, Contract Theory (Faster Capital, 2023) frames the screening as an implicit agreement to mitigate the risk of unqualified individuals, and Institutional Theory (Berthod, 2018) highlights how established norms and regulations shape the screening process for legitimacy and public trust. Integrating these perspectives into the proposed Theory of Integrated Health Competency and Institutional System Implementation, the study argues for a harmonized approach that considers individual health capital, transparent contractual elements, and adherence to institutional standards to ensure a competent and effective firefighting force.

OBJECTIVES OF THE STUDY

The main objectives of this study were to explore the medical screening process experiences of Fire Officer 1 in the Bureau of Fire Protection Regional Office V identify potential problems related to medical requirements, and ultimately propose provisions for medical facilities within the BFP in Region 5.

METHODOLOGY

Research Design

This study employs a qualitative research design. To better comprehend ideas, views, or experiences, qualitative research gathers and examines non-numerical data via text, voice, or video. It may be applied to obtain a comprehensive understanding of an issue or to provide fresh research concepts. Extended interactions with subjects in their natural environments are used in qualitative research to study open-ended questions about human realities and experiences. This method produces rich, descriptive data to help understand the participants' lives (Hoover, 2023). In this context, the application of qualitative research supports the continual improvement of the medical screening processes of Fire Officer 1 in the Bureau of Fire Protection in Region 5 as a tool carried out for exploring the fitness to work of individuals or aspiring applicants to ensure that a worker is fit to perform a specific duty or activity.

To protect participant privacy and streamline data handling in the medical

screening process, each individual is assigned a unique numerical code instead of identifiable personal information. This coding system ensures anonymity, enhances data security, and facilitates efficient data entry and analysis. In maintaining confidentiality, the secure management of the key linking these codes to participant identities is paramount to prevent unauthorized access and uphold ethical standards. Likewise, the study has undergone rigorous ethical review and has been granted ethical clearance. This signifies that the research protocol, including participant recruitment, data collection methods, and measures to ensure confidentiality and anonymity, has been carefully evaluated and deemed to adhere to relevant ethical guidelines and regulations.

Research Site

This study was conducted in the Bicol Region. The Bicol Region comprises six (6) provinces: Albay, Sorsogon, and Catanduanes. Camarines Sur, Camarines Norte and Masbate. The study site includes all provinces of the Bicol Region, which are equally represented by the study participants involving FO1s, including the Health Service Section personnel of the BFP Regional Office 5 as the implementer of the Medical Screening process. Thus, BFP Region 5 was chosen because of the reported medical condition and casualties of the newly hired fire officers during the Region's Recruit Orientation Program (ROP) at BFP Training Center, Kawa-Kawa, Ligao City.

Participants

The participants of the study were composed of newly hired FO1s equally represented from the six (6) provinces of Region 5 BFP personnel with more than four (4) times applications in the BFP that reached the stage of the medical screening process. Their repeated attempts to join the BFP suggest a strong and persistent motivation to serve in this capacity. This dedication may offer valuable insights into the factors driving individuals to overcome multiple hurdles in their pursuit of a career in fire service. Moreover, three (3) participants from the medical screening committee of the BFP Region 5 or the BFP personnel medical staff were interviewed since they are considered implementers of the medical screening phase under the recruitment and selection process. Their perspectives can offer an insider's view on the rationale behind the medical requirements, the practicalities and potential difficulties in conducting the assessments, and any observed trends or challenges related to the medical fitness of applicants.

Instrumentation

A semi-structured interview guide questions were utilized as the study's

research instrument, focusing on exploring the medical screening process of Fire Officer 1 in the Bureau of Fire Protection in Region 5 as a tool to explore several insights in the execution of a medical screening process for Fire Officer 1 applicants. To ensure that the instrument comprised the themes and areas that the study was supposed to examine, the items included in the interview guide questions were subjected to validation by personnel of BFP from the Regional Headquarters. Face and content validity are instrument measurement techniques used to judge and quantify measurements that appear acceptable to the general public and highly qualified experts. The first part of the interview guide question is on the personal experiences and circumstances of the FO1 applicants in BFP Region 5. Moreover, the second part focused on the potential problems in the medical requirements that could arise from overly stringent or outdated standards that might unnecessarily disqualify otherwise capable applicants. The set of interviews able the researcher to gather the data applicable to the participants. The interview guide question was answered by the identified participants. Ethical considerations, such as obtaining informed consent from the respondents and ensuring data confidentiality, were also considered during the data collection process.

Sampling Technique

Purposive sampling was used in selecting the FO1 applicants and medical staff. Purposive sampling is a non-probability sampling technique utilized in this qualitative study. It encompasses various non-probability techniques, also recognized as selective or subjective sampling. In this approach, the researcher used their judgment to select units for study. Purposive sampling aims to concentrate on specific characteristics within a population that are pertinent to answering the research questions effectively.

Data Analysis

To get a reliable response, the study employed thematic analysis as its primary method for analyzing the qualitative data gathered from interviews with FO1 applicants and medical staff. Thematic analysis is a widely used and flexible qualitative research method that goes beyond simply summarizing the content of the data. Instead, it involves a systematic process of identifying, organizing, and interpreting patterns of meaning known as themes across the entire dataset. This approach allows for a rich and detailed understanding of the participants' experiences, perspectives, and underlying concepts related to the BFP medical screening process in the Bicol Region.

Research Ethics Protocol

To uphold ethical standards, the researchers implemented several key measures: participation was strictly voluntary with informed consent obtained via a consent letter, respondent anonymity was maintained, and careful attention was paid to the wording of questions to preserve participant dignity. Moreover, the researchers are dedicated to the independent and impartial presentation of the study's data.

RESULTS AND DISCUSSION

This section contains a detailed presentation, interpretation, and discussion of data analysis regarding the study's results. The results and discussion were presented in the coded interview, which was derived from the different responses of the study participants in a thematic presentation sequentially arranged to answer the study's objectives.

1. Experiences of FO1 in the Medical Screening Process

The initial hurdle for aspiring Fire Officer 1 candidates in the Bureau of Fire Protection lies within the comprehensive Medical Screening Process, a critical stage designed to ensure the physical and medical fitness essential for the demanding duties of a firefighter. This pivotal phase involves a series of rigorous evaluations, from laboratory examinations and physical assessments to dental and psychological screenings, all aimed at identifying individuals with the robust health necessary to effectively respond in emergencies and uphold public safety.

Respondent 4 (FO1) says, "*Maybe there are different things, that's why others require different clearances*". This stressed that the Health Service required various medical clearances based on the doctor's evaluation of the laboratory results submitted by the applicant. The evaluating practitioner will consider all information and may request additional labs, tests, or other consultations. Thus, the need for various medical clearances will ensure that applicants are physically fit and ready for the physical demands of the training.

No Physical BFP Laboratory

A medical laboratory is a facility where medical tests are performed for the physician to make an accurate and informed decision about the diagnosis. The absence of a dedicated physical laboratory within the Bureau of Fire Protection presents a unique set of challenges to the medical screening process for aspiring firefighters. This lack of a centralized facility necessitates reliance on external

laboratories, potentially impacting the efficiency, consistency, and perceived fairness of the evaluations.

Participant 1 (FO1) says *“In the medical procedure, there is no one laboratory where everything should be there”*. Likewise, Respondent 2 (FO1) states *“There are people I know, sir, who I am a bit skeptical about because they pass. Because they went to different laboratories, sir”*. Moreover, Participant 4 (FO1) responded *“Maybe, it would be better if the BFP has its laboratory so that when there are clearances, it will be with them and not to other laboratory outside”*.

The absence of a physical BFP laboratory, as highlighted by the participants' responses, appears to be a significant concern within the BFP medical screening process. The core issue is the reliance on external laboratories. This lack of a centralized facility means the BFP has less direct control over the testing process, potentially leading to variations in standards and quality control. Different laboratories may use other equipment, procedures, and quality assurance measures, which could affect the comparability and reliability of test results.

The implication is that some applicants might pass the medical screening due to inconsistencies or lax standards at certain external laboratories. This directly undermines the purpose of the medical screening, which is to ensure that only physically fit individuals are admitted into the BFP. If results are not consistently reliable, the BFP risks admitting personnel who may not meet the demanding physical requirements of the job. On the other hand, a BFP-owned laboratory would streamline the process, centralize responsibility, and potentially reduce the time and resources spent coordinating with multiple external facilities. It would also enhance the BFP's ability to monitor and ensure the quality of the testing, leading to more reliable and trustworthy results.

The respondents' statement implies the need for a physical BFP laboratory where applicants can benefit from the fastest and fairest results. This means that BFP may have its laboratory clinics to provide fair medical reports to those deserving applicants. Aside from that, firefighters must be in excellent physical condition because their job requires much physical exertion. A physical laboratory can perform various tests, which provide more reliable and consistent screening. Onsite doctors can assess test results promptly and handle any discrepancies or concerns immediately.

This aids in determining whether the applicant is qualified for the position. Applicants will be tested using the same procedures, tools, and circumstances if there is a BFP laboratory. This standardization is essential for the screening process to be fair and consistent. Therefore, it concludes that the Bureau of Fire Protection needs a medical laboratory to provide medical and laboratory services for applicants during recruitment and its personnel to monitor and sustain the

medical health condition of the firefighters.

Access to other Clinical Laboratories

Accessibility to other clinical laboratories may entail faster laboratory results and evaluation, however, access to other clinical laboratories even if DOH accredited cannot ensure data integrity. The second global theme on access to other clinical laboratories was reflected in the response of Respondent 2 stating that:

Participant 2 (FO1) says “*That is right, sir; the BFP only has an authorized clinic/laboratory that can do medical in every city or province, only the DOH-accredited ones. So, there are possibilities of manipulation*”. This statement adds a layer of complexity to the issue. Even when the BFP uses DOH-accredited facilities, the potential for manipulation of results remains a concern. This shows that accreditation alone may not guarantee the integrity of the medical screening process. There might be a need for more stringent oversight, auditing, or standardized procedures to minimize the risk of fraudulent or inaccurate results, even within accredited laboratories.

The participants’ responses indicate that the absence of a physical BFP laboratory is not merely a logistical inconvenience but a systemic issue that raises concerns about standardization, result validity, and overall process integrity. Establishing a BFP-owned laboratory could address these concerns, leading to a more efficient, reliable, and accountable medical screening process.

This statement implies that the BFP allows the conduct of laboratory tests in DOH-accredited medical laboratories. The applicants may opt to have their laboratory test in their respective cities or provinces that they may personally know or even owned by their friends, relatives, and family, wherein, manipulating the laboratory results would be possible even if the laboratory is DOH accredited. As a result, the Bureau of Fire Protection is dealing with issues concerning the accuracy and reliability of laboratory results obtained from external laboratories, as the BFP does not have a laboratory facility to cater to the applicants.

A limited number of Medical Staff

Medical staff play a crucial role during the recruitment process in the Bureau of Fire Protection to assess the applicant’s physical and mental health condition to perform the job. Participant 3 (FO1) says “*It is organized; it only takes a little time because there are only a few processing staff*”. Likewise, Respondent 5 (FO1) also states “*The procedures are easy sir, they are not difficult, it would just take a long time*”. On the other hand, Participant 8 (BFP Medical Staff) says “*The procedures are ok because they are only light and not very invasive. Maybe it would be better if*

there were more doctors and nurses”.

This shows that the experiences in the medical screening process are not the complexity or difficulty of the procedures, but rather the lack of sufficient medical personnel to handle the workload efficiently. The implication is that increasing the number of doctors and nurses could significantly improve the timeliness of the screening process, reducing delays for applicants. The participants' responses indicate that the absence of a physical BFP laboratory is not merely a logistical inconvenience but a systemic issue that raises concerns about standardization, result validity, and overall process integrity. Establishing a BFP-owned laboratory could address these concerns, leading to a more efficient, reliable, and accountable medical screening process. Additionally, the limited number of medical staff is identified as a key factor contributing to delays in the screening process.

This statement stressed the need for more medical staff to improve the applicant screening process. A thorough medical evaluation among applicants with insufficient medical staff puts pressure on staff resources, resulting in long waits for applicants. Therefore, it implies that the Bureau of Fire Protection Region 5 should consider having additional staff and resources to make the medical screening procedures more efficient and productive.

Moreover, it shows that delays are less about procedural complexity and more about insufficient medical personnel to manage the workload. The implication is clear, increasing the number of doctors and nurses could significantly expedite the screening process for applicants. Furthermore, the absence of a physical BFP laboratory is more than a logistical inconvenience; it's a systemic issue that raises serious concerns about standardization, the validity of results, and the overall integrity of the process. Establishing a BFP-owned laboratory could address these concerns, leading to a more efficient, reliable, and accountable medical screening process. Additionally, the shortage of medical staff is a key factor causing delays, highlighting the need for more resources to ensure the timely processing of applications and maintain the BFP's readiness to serve the community.

Lengthy medical screening procedure

Lengthy medical screening processes and appointment problems lead to longer waiting times for the applicant during the medical screening. A lengthy medical screening procedure can have significant implications for applicants in conducting the screening. For applicants, a prolonged process can lead to increased anxiety, delayed entry into their desired profession, and potential financial strain due to additional testing.

Participant 3 (FO1) states *“There are instances where they only do a medical evaluation at the mall, it would be better if the BFP has its place”*. Moreover,

Respondent 5 (FO1) also says *“My experience is ok because the place is fine because it’s in a mall, it’s a bit cold even if you have to wait for a long time”*. On the other hand, Participant 6 (FO1) states, *“It’s ok, sir. It took a long time for the evaluation because there are only a few of them, there are a lot of us sir. Then sometimes the venue was only at the mall. Then I found out, sir, that BFP doesn’t have a hospital”*.

The lengthy procedures and associated problems with appointment scheduling contribute to longer waiting times for applicants. This lengthy process has several negative implications for applicants, including increased anxiety, delays in entering their desired profession, and potential financial strain due to the need for additional testing and prolonged waiting. This shows that temporary or makeshift locations, such as malls, may not be conducive to an efficient and organized medical screening process. Malls, in particular, are designed for retail and leisure activities, not medical examinations, and may lack the necessary infrastructure, privacy, and controlled environment for such procedures.

Moreover, the long waiting times are exacerbated by a shortage of personnel to conduct the evaluations. When a small number of staff are tasked with processing a large number of applicants, delays are inevitable. The analysis shows that the lengthy medical screening procedures in the BFP are caused by a combination of factors, including inadequate facilities, staffing shortages, and a lack of dedicated medical infrastructure. These issues not only prolong the screening process but also potentially contribute to applicant anxiety and delays in their career progression. Addressing these systemic problems is crucial to improving the efficiency and effectiveness of the BFP’s recruitment process.

Errors in Medical Evaluations

Medical evaluation also involves medical errors due to different factors. Errors in medical evaluations can lead to incorrect assessments of an individual’s health status, potentially resulting in the disqualification of qualified candidates or, conversely, the admission of unfit individuals. Therefore, it is essential to identify the potential sources of errors in medical evaluations and implement robust quality control measures to minimize their occurrence and ensure the accuracy and reliability of the process.

Participant 1 (FO1) says *“Maybe if the other medical laboratories were not able to check or there is a little discrepancy, you will not be able to pass”*. Likewise, Respondent 4 (FO1) says, *“Maybe if there are mistakes sir, or different evaluations made by the doctor”*. Furthermore, Participant 6 (FO1) states *“Maybe almost nothing, sir. If there’s a mistake in the evaluation, because even if the result is just a little lower or higher, you will fail or go for clearance, and then you still won’t be able to enter”*.

This shows a concern that not all laboratories involved in the process may be providing accurate or reliable results and that there may be insufficient oversight to catch these errors. Even minor discrepancies could lead to disqualification, indicating the stringent nature of the standards and the potential for unfairness if errors occur. Accordingly, different doctors providing different evaluations suggest a concern about the subjectivity inherent in some aspects of medical assessments. If evaluations vary significantly between doctors, the process may be perceived as arbitrary and unreliable. This could lead to qualified candidates being unfairly disqualified due to differences in professional judgment. The concern is that even if a mistake is made in the evaluation, the applicant may not proceed, highlighting the high stakes involved and the potential for errors to have significant and irreversible consequences for applicants.

Unfair disqualification of qualified candidates, as highlighted by all three respondents, can lead to qualified individuals being excluded from service, harming the individuals involved and depriving the BFP of potentially valuable personnel. If errors are perceived as common or unavoidable, the integrity of the entire selection process is undermined, eroding trust in the BFP and discouraging qualified individuals from applying. Errors in medical evaluations could also lead to legal challenges from aggrieved applicants, which can be costly and time-consuming for the BFP.

Furthermore, if unfit individuals are admitted due to errors in the evaluation process, this could have negative consequences for the BFP's operational readiness and the safety of firefighters and the public. In conclusion, the responses underscore the need for robust quality control measures to minimize errors in medical evaluations. This includes ensuring the reliability of laboratories, standardizing evaluation procedures, providing clear and objective criteria for assessment, and implementing mechanisms for error detection and correction.

Appointment Scheduling Problems

Appointment scheduling is necessary to reduce applicant waiting times and the physical exhaustion of medical staff, which can increase the chances of medical errors. Appointment scheduling problems may arise due to several factors and may result during the medical screening process.

Participant 7 (BFP medical staff) says *"On time, sir. There should be a proper schedule for the cut-off of each province where the applicant will be placed"*. The results show that applicants encountered a mix of excellent and substandard procedures used in BFP-Region 5's medical screening process. Even though BFP medical staff are flexible, the small number of BFP clinical laboratories, the drawn-out medical screening procedure, and scheduling issues caused significant

challenges to the overall medical screening process.

This implies poor appointment scheduling and improper cut-offs for medical evaluation of the applicants. The experiences of FO1 in the medical screening process expound on the respondents' experiences as they encounter the current medical screening process conducted by the BFP-Region 5. The participants agreed collectively on its current status as they expressed their sentiments. They believed that several improvements needed to be implemented for the smooth flow of the medical screening process to avoid encountering problems for the agency and applicants during the medical screening process in general.

Relatedly, applicants have varying perceptions of medical screening; while some see it as necessary for safety, others view it as overly rigorous. Transparency is key to building trust (Zhang et al., 2024). Negative experiences during screening can lower motivation and recruitment rates (Bjelland et al., 2024), and perceived inequity can lead to disillusionment. Candidates often experience anxiety due to demanding physical tests (Primo & Collado, 2024), and screening can uncover previously unknown health conditions that may disqualify them (Longa & Perena, 2024).

In military recruitment, screening has significant psychological implications, including stress and anxiety (Black, 2024; Dagher et al., 2024; Mani et al., 2024).

Clear communication about expectations and results is crucial (Datta et al., 2024). Rigid health standards, combined with a lack of understanding of individual circumstances, can increase anxiety (Muring, 2024; Colarina, 2024). There's a need for inclusive practices, as intense physical assessments may disproportionately affect certain candidates (Fisher et al., 2025). Finally, the medical screening process for law enforcement, such as the PNP, requires improved transparency and communication (Banatao et al., 2024).

2. Potential problems in the Medical Screening Process

The medical screening process, while ensuring public safety and workforce readiness, is not without its potential problems. These issues can range from logistical challenges and inconsistencies in standards to ethical dilemmas and the potential for unintended consequences. Examining these potential pitfalls is essential for optimizing the screening process, ensuring fairness, and accuracy, and minimizing negative impacts on individuals and organizations.

In the medical screening process, potential problems may occur before or even during the actual process that would significantly affect both applicants and the BFP to hire deserving individuals especially those who are more skilled and responsible. As to the medical requirements, there were emerging themes from key informants' insights and narratives on the potential problems in the medical

screening process of BFP-Region 5.

More Medical Coverage

More medical coverage entails additional medical tests required medical examinations during the medical screening procedure. This necessitates comprehensive medical coverage that goes beyond basic screening during recruitment. The demanding nature of firefighting, with its inherent risks and physical challenges, highlights the importance of providing ongoing and extensive medical support to these personnel. This includes not only addressing immediate health concerns but also proactively managing long-term health and promoting overall wellness.

Participant 6 (FO1) says *“Apart from neuro, it is easy because it is handwritten. But I wonder if the person’s attitude or behavior is also covered in the exam, sir, which I hope there should be”*. Moreover, Participant 7 (BFP Medical Staff) responded that *“In the medical procedure, sir, the physique or appearance should also be checked for previous fractures, scars, malformations, or anything hindering training”*.

The call for more medical coverage within the Bureau of Fire Protection extends beyond the standard recruitment medical examination, emphasizing the need for comprehensive and ongoing medical support for firefighters. This necessity stems from the demanding and hazardous nature of their profession, requiring proactive management of both immediate and long-term health needs, alongside the promotion of overall wellness. The perspective of a frontline firefighter highlights a perceived gap in the current screening process, suggesting the inclusion of psychological or behavioral assessments in addition to the neurological exam. This reflects an understanding that a firefighter’s suitability goes beyond physical health, encompassing mental and emotional resilience.

Furthermore, the BFP medical staff highlights the importance of a thorough physical assessment, advocating for the examination of the physique and the identification of any pre-existing conditions like fractures, scars, or malformations that could impede training. This implies a recognized need to enhance the medical screening and support systems within the BFP to ensure the holistic well-being and operational readiness of its personnel, acknowledging both their physical and psychological demands.

Further, this statement implies that more medical coverage should be implemented in the medical procedure, ensuring that only firefighters who are fully fit for their roles are selected through improved medical coverage. Therefore, the Bureau of Fire Protection should improve their medical coverage or medical tests, particularly on the ability of the applicants to cope with stressful situations and meet the physical appearance or standard of the organization.

Lack of Integrity of Medical Results

The integrity of the applicants in conducting their laboratory tests is necessary to ensure that the doctor can provide an informed decision about the diagnosis of the result of the laboratory. Issues may arise regarding the authenticity of the applicant's medical results since the laboratory results are coming from different laboratory clinics.

Participant 9 (BFP Medical Staff) says, "*The neuro, sir, it's from a third party, all tests sir. So we will just wait for the applicants to submit. What if it was altered for some other reasons that we also didn't know*". This statement stressed the authenticity of the applicant's medical results since the laboratory results are coming from different laboratory clinics. It concerns whether the applicant conducts the test and needs ID verification before performing it at a different laboratory clinic accredited by the Department of Health. Inaccurate information might arise from mistakes made when entering or transcribing medical results.

The reliance on third-party laboratories for applicant medical testing introduces a significant vulnerability concerning the integrity of the submitted results. As highlighted by the BFP Medical Staff, the lack of direct control over the testing process raises concerns about potential manipulation or alteration of results by applicants. This reliance necessitates a system of trust in external entities and the honesty of applicants, which may not always be warranted, potentially leading to inaccurate medical assessments and compromised hiring decisions.

To safeguard the integrity of the medical screening process and ensure accurate diagnoses, the BFP needs to explore strategies to mitigate the risks associated with outsourced laboratory testing. This could involve implementing stricter protocols for the submission and verification of results, exploring partnerships with accredited laboratories under closer BFP oversight, or even considering the establishment of its in-house testing facilities for critical assessments. Addressing this vulnerability is crucial for maintaining the health standards and overall suitability of incoming firefighters.

Issues on acquiring Medical Clearance

Acquiring medical clearance within the Bureau of Fire Protection presents a multifaceted set of challenges that can impact the efficiency and reliability of the recruitment process. These issues range from the scope and depth of the medical examinations conducted to concerns surrounding the integrity and authenticity of applicant-submitted laboratory results. These impediments are crucial for developing effective strategies to streamline the medical clearance process and ensure that only physically and mentally fit individuals are admitted into the demanding profession of firefighting. The subsequent analysis will delve into

specific concerns raised by BFP personnel regarding the comprehensiveness of medical coverage and the potential for manipulation of test results, shedding light on the complexities inherent in this critical stage of recruitment.

Participant 2 (FO1) says, *“When you do a clearance test, with other specialists like when you did the cardio clearance. It is a hassle.”* Furthermore, Participant 3 (FO1) also states that *“It is quite expensive to get clearance from another doctor. Then the specialists will say, clearance is no longer required, but they will still require it”*.

The statement highlights the expensive medical clearance incurred by the applicants in securing clearances from other specialists and the long process of getting clearance from specialists. The BFP medical doctors or medical officers who evaluated the results are still asking for clearance or a second opinion even if some specialists are considering it not necessary or no longer required. Possible tests or clearances that may be included during the process must be included in the published requirements so that the applicants can also prepare for the expenses that may be incurred and confirm whether they are physically fit to undergo the BFP training.

Likewise, the experiences shared by frontline firefighters highlight the inconvenience and financial burden associated with obtaining medical clearances from external specialists. The process is perceived as a hassle, potentially due to logistical complexities and time constraints. Moreover, the cost of these specialized clearances can be significant, further exacerbated by inconsistencies where specialists might deem the clearance unnecessary yet still mandate it. This suggests a lack of standardized protocols and potentially unnecessary financial strain on applicants.

This implies that the BFP should strive to streamline the process of obtaining specialized medical clearances. This could involve establishing clearer guidelines on when such clearances are necessary, negotiating standardized fees with accredited specialists, or exploring options for conducting some specialized tests in-house or through more coordinated arrangements. Reducing the inconvenience and financial burden on applicants can lead to a more efficient and equitable recruitment process.

Non-verification of medical results

The validation of medical results conducted by other laboratories means assessing accuracy and reliability. Relying solely on the documents provided by candidates introduces the risk of accepting falsified or altered test outcomes, which could lead to the recruitment of individuals with underlying health conditions that might compromise their performance and safety, as well as the safety of their colleagues.

Participant 3 (FO1) states that *“Maybe there are people who have slipped through or will be able to slip through because others are taking their medical from other clinics”*. This statement stressed that the applicant’s result was the basis for medical evaluation and that there was no verification or counterchecking of medical results from other laboratories. The concern raised by the applicant points to a significant weakness in the current medical clearance process, and the potential for inconsistent standards and oversight due to applicants undergoing medical examinations at various independent clinics. This decentralized approach creates opportunities for individuals to slip through the screening process, either intentionally by seeking out less stringent clinics or unintentionally due to variations in testing protocols and interpretation across different medical facilities. The lack of a centralized and standardized medical assessment system compromises the uniformity and reliability of the overall screening process.

To mitigate the risk of unqualified applicants being admitted due to inconsistent medical evaluations, the BFP should explore strategies for greater centralization and standardization of the medical clearance process. This could involve establishing a panel of accredited medical facilities with clearly defined testing protocols and reporting standards, or ideally, developing an in-house medical assessment unit. Implementing a more controlled system would enhance the rigor and reliability of the medical screening, ensuring that all applicants are evaluated against the same stringent criteria, regardless of where they undergo their medical examinations.

Authenticity of Medical results

The authenticity of the medical results was mentioned above related to the lack of integrity of the applicant’s medical results under the status of medical requirements. Ensuring the authenticity of medical results submitted by applicants is a paramount concern in the Bureau of Fire Protection’s (BFP) recruitment process. Given that these results often originate from various independent medical clinics, questions arise regarding the potential for fraudulent or tampered documentation.

Participant 7 (BFP Medical Staff) states *“As for the requirements, sir, since they are having their tests outside, there are possibilities that other people will take the test instead of the applicants if ever they have a problem. So, we can’t get their real laboratory results, especially other results, there is no picture or profile of the client/applicant where the actual samples were taken. We also do not conduct counter-checking at diagnostic centers”*.

Participant 8 (BFP Medical Staff) also says *“Maybe it is because of the genuineness of the results coming from the applicants”*. Participant 9 (BFP Medical Staff) also says *“Please add some other measures so that the authenticity of*

the lab results can be maintained as part of the medical requirements they submit”.

The response stressed the credibility of the applicant’s medical results because they were obtained from various testing clinics or laboratories. It concerns whether the applicant administers the test themselves or by other healthy young individuals and whether the Identification Card of applicants is being verified before completing the test even if the clinic is accredited by the Department of Health. Thus, this issue must be addressed to have accurate information to minimize errors during medical evaluation.

Moreover, the concerns raised by multiple BFP Medical Staff underscore a significant vulnerability regarding the authenticity of applicant-submitted laboratory results. Participant explicitly points out the possibility of proxy test-takers due to the external procurement of these tests, the lack of applicant identification on some results, and the absence of BFP-led counter-checking at diagnostic centers. This lack of direct oversight creates a system susceptible to fraudulent submissions, making it difficult to ascertain the true health status of applicants. Participants further emphasize the issue of result genuineness and advocate for the implementation of additional measures to ensure the authenticity of the submitted medical requirements.

This implies that to address this critical issue of potential fraud and ensure the integrity of the medical screening process, the BFP needs to implement robust verification mechanisms for applicant-submitted laboratory results. This could involve several strategies: requiring photographic identification on all laboratory result forms, implementing a system for applicants to present identification at the time of testing that is cross-referenced upon submission, establishing direct communication and verification protocols with diagnostic centers, or ideally, exploring the feasibility of conducting some or all critical laboratory tests through accredited facilities under direct BFP supervision. Implementing such measures would significantly enhance the authenticity and reliability of the medical information used for recruitment decisions, safeguarding the health standards and operational readiness of the firefighting force in the region.

The adequacy of medical implementation within the Bureau of Fire Protection would specifically refer to how effectively and appropriately medical services and protocols are integrated into their emergency response operations and the overall health and safety of their personnel. Medical Implementation is essential to address barriers to the implementation during the medical screening process. The emerging themes from key informants’ insights and narratives on the potential problems in the medical screening process of BFP-Region 5 in terms of Adequacy of medical implementation are as follows:

Lack of Examination Room

The medical implementation strategies should include resources like a physical examination room. This infrastructural limitation could impede the efficient and private conduct of medical assessments, potentially leading to delays, compromised confidentiality, and a less-than-ideal environment for medical staff and the applicants undergoing evaluation.

Participant 1 (FO1) says “*The only problem is with the physical examination room because we are 10 applicants in one room. It would be better if it be conducted one-by-one and in an owned hospital to have privacy*”. This statement stressed the need to have a medical facility during the medical evaluation of the practitioner to the applicants. This is to accommodate the applicants efficiently and effectively with decency and privacy. Therefore, a physical examination room should be adequate to perform the relevant examination to prevent medical errors and potential problems in the future.

Moreover, the experience shared by a frontline firefighter applicant highlights a significant concern regarding the lack of adequate examination room facilities during the physical assessment. Conducting physical examinations for ten applicants simultaneously in a single room compromises the privacy and dignity of the individuals undergoing the medical evaluation. This situation not only creates a potentially uncomfortable and impersonal environment but could also hinder the thoroughness and accuracy of the examinations due to the lack of individual space and the potential for distraction. The preference for one-on-one examinations in a dedicated hospital setting underscores the need for a more private and professional environment for this sensitive aspect of the recruitment process.

This implies that to address the issue of inadequate examination room facilities and ensure the privacy and comfort of applicants during their physical assessments, the BFP should prioritize securing appropriate spaces for medical examinations. This could involve allocating dedicated rooms within existing BFP facilities, establishing agreements with local hospitals or clinics for the use of their examination rooms, or ideally, planning for the development of their medical assessment area. Providing private and individual examination spaces will not only enhance the applicant experience but also contribute to a more professional and effective medical screening process, ultimately ensuring the selection of physically fit candidates while respecting their dignity.

Relatedly, medical screening in the BFP presents several challenges for candidates. Anxiety is common due to the importance of physical fitness for the role. Candidates may underestimate the psychological demands of the evaluation process (Klinoff, 2025), and financial constraints can hinder their ability to meet

medical requirements. A poorly structured screening process can deter qualified applicants and affect the BFP's operational readiness (Lovalekar et al., 2024). Studies suggest that increased transparency and support could alleviate candidate anxiety, and a combined approach of psychological preparation with physical assessments may be beneficial (Tornero-Aguilera et al., 2024).

These challenges are mirrored in other Philippine contexts. For instance, applicants in the Philippine Maritime sector face similar pressures during medical assessments (Lin & Sarza, 2024). Strict health requirements can cause anxiety about medical history (Nayoyos-Refugia, 2024), and the psychological impact of assessments can lead to feelings of inadequacy, particularly for those concerned about rejection based on health criteria, as seen in the context of prison management (Jones & Narag, 2024; Rona et al., 2025). Financial constraints and limited access to resources exacerbate emotional distress.

The BFP also faces staffing challenges, as emergency response necessitates a sufficient number of trained personnel (Khazaei et al., 2024). Inadequate staffing can compromise response times and endanger staff health and safety. Physical standards may disproportionately exclude those from lower socioeconomic backgrounds with limited access to healthcare (Pastrana, 2024). Psychological evaluations can also be a barrier, as mental health stigma may deter candidates from seeking help or disclosing relevant information (Cruz, 2024). Socioeconomic factors, such as lack of transportation and resources, can further disadvantage applicants (Ani et al., 2025). Applicants who do not meet medical standards may be redirected, limiting their potential contributions (Necesario, 2024), and strict adherence to health regulations can perpetuate disparities due to unequal access to healthcare. Moreover, the effectiveness of current medical evaluation programs in addressing the specific health risks faced by firefighters is questioned. Existing protocols may not adequately consider these risks, potentially compromising candidate preparedness and operational safety (Bloeser et al., 2024).

Table 1
Summary Discussion

Themes	Descriptions
1. Experiences of FO1 in the Medical Screening Process	
<i>No Physical BFP Laboratory</i>	Due to the lack of a centralized laboratory within the Bureau of Fire Protection (BFP), leading to skepticism about the consistency and reliability of results obtained from external laboratories.
<i>Access to other Clinical Laboratories</i>	BFP relies on DOH-accredited external clinics/laboratories for medical screenings, raising concerns about potential manipulation of results due to the lack of a BFP-controlled facility.
<i>A limited number of Medical Staff</i>	Time-consuming due to limited processing staff, and a medical staff member suggested increasing the number of doctors and nurses.
<i>Lengthy medical screening procedure</i>	Noting instances where it was conducted in malls, which some found acceptable despite potential wait times, while others expressed a preference for the BFP to have its own dedicated facility, with one participant also noting the BFP's lack of a hospital and the lengthy evaluation process due to limited staff.
<i>Errors in Medical Evaluations</i>	Minor discrepancies or errors in medical laboratory checks or doctors' evaluations could lead to failing the screening process or needing further clearances, potentially hindering their entry into the BFP.
<i>Appointment Scheduling Problems</i>	Need for a clear and timely schedule for the application cut-off in each province where applicants will be assigned.
2. Potential problems in the Medical Screening Process	
<i>More Medical Coverage</i>	A participant noted the ease of the handwritten medical exam and suggested including an assessment of attitude or behavior, while a BFP medical staff member emphasized the importance of checking physical attributes that could impede training.
<i>Lack of Integrity of Medical Results</i>	The neurological examinations are outsourced to a third party, raising concerns about the potential for alteration or unknown issues with the results before they are submitted by the applicants.
<i>Issues on acquiring Medical Clearance</i>	Obtaining clearances from external specialists, such as for cardiology, to be a troublesome and potentially expensive process, with instances where specialists deemed clearance unnecessary but it was still required.

Lack of Examination Room

Lack of privacy in the physical examination room, where multiple applicants are examined simultaneously, and suggested conducting these exams individually in a BFP-owned hospital for better privacy.

3. Proposed provisions of medical facilities for the Medical Screening Process in BFP

This proposed provision outlines a three-phase medical screening process for Fire Officer 1 (FO1) applicants. Guided by Republic Acts 9263 and 11589, and the 2017 Omnibus Rules on Appointments, the process begins with an initial evaluation of application folders based on height, weight/BMI, age, blood pressure, and outsourced ECG results. The second phase involves a neuropsychiatric examination for qualified applicants, including written tests and interviews. The final and most comprehensive phase occurs at the BFP medical facility, encompassing physical and specialized exams (vision, ENT, chest X-ray, stress test, in-house ECG, dental) and a detailed list of mandatory laboratory tests, establishing the BFP facility as the official testing center. The document also briefly addresses proposed provisions for upgrading BFP medical facilities to support these screenings and annual medical examinations.

The Bureau of Fire Protection aims to improve its firefighter recruitment medical screening process. Current challenges include inadequate examination rooms, privacy concerns, and difficulties in verifying external medical results. The proposed solutions involve medical facilities with private examination spaces and dedicated medical areas. This aims to ensure applicant dignity, improve the accuracy and reliability of medical evaluations, and enhance the authenticity of medical results through better sample control and potential in-house testing. The upgrades also intend to streamline the process, reduce delays, and build trust in the BFP's recruitment procedures. The implementation will involve needs assessment, securing and equipping spaces, standardizing protocols, exploring in-house testing, strengthening partnerships with accredited labs, training medical staff, and continuous monitoring.

CONCLUSIONS

Based on the study's findings, the experiences of FO1 applicants in Legazpi City, Bicol, Philippines, during the medical screening process reveal several key challenges. The process is often characterized by difficulties in obtaining medical clearances and fulfilling other requirements, compounded by the absence of a physical BFP laboratory necessitating reliance on external clinics. This external

access, while providing options, contributes to concerns about result authenticity and consistency. The limited number of medical staff further exacerbates issues, contributing to lengthy screening procedures and potential errors in medical evaluations. Moreover, appointment scheduling problems add to the overall burden and frustration experienced by applicants. Addressing these systemic issues is crucial to streamlining the medical screening process, ensuring a more efficient, reliable, and less burdensome experience for aspiring firefighters in the region.

The BFP medical screening process faces potential problems in two key areas: medical requirements and the adequacy of medical implementation. Issues with medical requirements include: the need for more comprehensive medical coverage; concerns about the lack of integrity and potential manipulation of medical results; difficulties in acquiring medical clearances; the absence of robust verification of submitted results; and questions surrounding the authenticity of those results. In terms of implementation, a significant challenge is the lack of adequate examination room facilities. These issues collectively highlight vulnerabilities that could compromise the effectiveness and fairness of the medical screening process.

Moreover, the proposed provisions for enhanced medical facilities within the BFP represent a comprehensive strategy to address current shortcomings in the recruitment process. By prioritizing applicant well-being, process integrity, and result authenticity, these measures aim to create a more efficient, reliable, and respectful medical screening environment. The phased implementation, which includes thorough planning, the establishment of dedicated and well-equipped examination spaces, improved sample handling, and ongoing monitoring, underscores a commitment to continuous improvement and the development of a stronger, more capable firefighting force.

TRANSLATIONAL RESEARCH

The findings of this study could be translated as provisions of medical facilities for the Medical Screening Process in BFP aims of upgrading the medical facilities for the BFP recruitment process are multifaceted, focusing on both the well-being of the applicants and the integrity of the selection process. The proposed provisions of enhanced medical facilities will be a phased process, taking into account local resources and logistical limitations. Initial steps involve a thorough needs assessment and planning phase, followed by securing and equipping dedicated examination spaces, ideally progressing towards a dedicated medical assessment unit. Furthermore, these improvements aim to streamline

the entire medical screening process, reducing delays and inconveniences for applicants. Ultimately, the development of professional and organized medical facilities intends to project an image of competence and care, fostering trust and confidence in the BFP's recruitment procedures within the local community.

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LITERATURE CITED

Ani, H. R., Alcantara, J. B., Cole, A. B., Oriel, R. O., Garcia, R., Punzalan, J. L., ... & Villa, E. B. (2025). Assessing the Impact of Random Drug Testing on The Internal Cleansing of The Philippine National Police in Police Regional Office 12. *International Journal of Multidisciplinary: Applied Business and Education Research*, 6(1), 332-347.

Auerbach, P., & Green, F. (2024). Reformulating the Critique of Human Capital Theory. *Journal of Economic Surveys*.

Banatao, M. C., Castillo, R. P., Grospe, Z. O., Pia, K. R. M., Ricohermoso, N. M., & Villa, E. B. (2024). Impact of Training Practices on Police Misconduct in Pampanga Police Provincial Office. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(7), 2876-2905.

Berthod, O. (2018). Institutional Theory of Organizations. <https://tinyurl.com/48x6r597>

- Bjelland, H., Gehandler, J., Meacham, B., Carvel, R., Torero, J. L., Ingason, H., & Njå, O. (2024). Tunnel fire safety management and systems thinking: Adapting engineering practice through regulations and education. *Fire Safety Journal*, 146, 104140.
- Black, J. (2024). *Recruiting crisis: Analysis of Navy recruiting deficiencies in 2022 and beyond* (Doctoral dissertation, Acquisition Research Program).
- Bloeser, K., Kimber, J. M., Santos, S. L., Krupka, C. B., & McAndrew, L. M. (2024). Improving care for veterans' environmental exposure concerns: applications of the consolidated framework for implementation research in program evaluation. *BMC Health Services Research*, 24(1), 241.
- Colarina, J. S. (2024). Level of effectiveness of the coast guard damage controlman rating course and trainee onboard performance toward program enhancement. *Ignatian International Journal for Multidisciplinary Research*, 2(6), 1828-1851.
- Cruz, Q. V. (2024). Awareness and Readiness of Fire Officers on The Possession of Firearms: Basis for Policy Development. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(12), 4992-5005.
- Dagher, J., Boustani, N. M., & Khneyzer, C. (2024). Unlocking HRM Challenges: Exploring Motivation and Job Satisfaction within Military Service (LAF). *Administrative Sciences*, 14(4), 63.
- Datta, P., Kaur, A., Sassi, N., Gulzar, Y., & Jaziri, W. (2024). An evaluation of intelligent and immersive digital applications in eliciting cognitive states in humans through the utilization of Emotiv Insight. *MethodsX*, 12, 102748.
- Faster Capital (2023). Screening: The Power of Screening in Contract Theory. <https://tinyurl.com/yt59st24>
- Fisher, M. M., Madolid, J. C., Demate, E. M., Corsena, A. R., Villa, E., Mobo, F. D., & Golla, N. S. (2025). Assessing The Effectiveness of The PNP Internal Disciplinary Mechanism in Enhancing Job Satisfaction among Personnel. *International Journal of Multidisciplinary: Applied Business and Education Research*, 6(1), 431-452.

- Hoover, D. (2023). *A Grounded Research Exploration of How Psychologists Work with Themes of Religion and Spirituality in Couples Counseling*. Our Lady of the Lake University.
- Jones, C., & Narag, R. (2024). Prioritizing Prison Reform: The Real Challenges behind Managing Violent Extremist Prisoners in the Philippines. *Contesting the Philippines*, 190.
- Khazaei, A., Afshari, A., Khatiban, M., Borzou, S. R., Oshvandi, K., Nabavian, M., & Maddineshat, M. (2024). Perceptions of professional challenges by emergency medical services providers: a qualitative content analysis study. *BMC Emergency Medicine*, 24(1), 38.
- Klinoff, R. (2025). *Introduction to fire protection and emergency services*. Jones & Bartlett Learning.
- Lin, M. S. M., & Sarza, N. A. (2024). Identifying critical challenges and government's responses for Filipino seafarers during the COVID-19 pandemic. *Maritime Business Review*, 9(1), 57-73.
- Longa, M. N., & Perena, E. S. Capability of Bureau of Fire Protection Personnel in Responding to Emergencies in the Province of Sorsogon.
- Lovalekar, M., Montgomery, S., Arent, S. M., Kleykamp, M., Lucas, J., McFadden, B. A., ... & Nindl, B. C. (2024). Design considerations for a multidisciplinary approach to provide policy recommendations on gender-integrated recruit training in the Marine Corps. *Military Medicine*, 189(Supplement_2), 3-11.
- Mani, V., Pomer, A., Pritchett, S., Coles, C. L., Schoenfeld, A. J., Weissman, J. S., & Koehlmoos, T. P. (2024). Filling the gaps in the COVID-19 pandemic response: medical personnel in the US military health system. *BMC Health Services Research*, 24(1), 1140.
- Muring, J. R. M. (2024). Readiness of the Philippine Coast Guard in the Surveillance and Monitoring of Radioactivity in its Maritime Jurisdiction.
- Nayoyos-Refugia, J. M. (2024). Exploring Employability, Program Relevance and Job Satisfaction among BS Criminology Graduates. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(1), 130-139.

- Necesarior, K. C. (2024). The role of the Philippine coast guard toward sustainable coastal and marine tourism in relation to United Nations Sustainable Development Goals.
- Obeagu, E. I., & Akinleye, C. A. (2024). Stabilizing Hemoglobin Levels: A Vital Aspect of Blood Transfusions in HIV Management. *Elite Journal of Haematology*, 2024; 2 (9), 1-8.
- Pastrana, H. J. P. (2024). Implementation and Effectiveness of Philippine National Police (PNP) Mandatory Trainings: Their Influence to the Performance of Personnel.
- Primo, G., & Collado, V. (2024). Lived Experiences of Bureau of Fire Protection Firefighters in Baguio City Fire Station, Philippines. *DMMMSU Research and Extension Journal*, 8, 93-106.
- Rona, A. C., Libradilla, J. F. A., Calpo, M. M., & Baldoz, D. R. J. (2025). Practical Takeaways of Criminology Interns Deployed at Provincial District Jail. *Available at SSRN 5194787*.
- Tornero-Aguilera, J. F., Stergiou, M., Rubio-Zarapuz, A., Martín-Rodríguez, A., Massuça, L. M., & Clemente-Suárez, V. J. (2024). Optimising combat readiness: Practical strategies for integrating physiological and psychological resilience in soldier training. In *Healthcare* (Vol. 12, No. 12, p. 1160). MDPI.
- Wang, B., Asan, O., & Zhang, Y. (2024). Shaping the future of chronic disease management: Insights into patient needs for AI-based homecare systems. *International journal of medical informatics*, 181, 105301.
- Zhang, G., Liu, C., Yang, L., Kong, Y., Fan, X., Zhang, J., ... & Yuan, B. (2024). A flame-retardant and conductive fabric-based triboelectric nanogenerator: Application in fire alarm and emergency evacuation. *Journal of Colloid and Interface Science*, 658, 219-229.