

43RD ANNUAL RESEARCH AND EDUCATION FORUM MARCH 29-31, 2023 HYBRID MODALITY

HEALTH AND EDUCATION IN CHALLENGING TIMES



GENERAL GUIDELINES FOR ABSTRACT SUBMISSION



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Abstract Submission Deadline: January 18, 2023, at 11:59 PM.

This section includes the revised guidelines for the submission of abstracts. The Forum will be held **March 29-31, 2023**. The Forum's theme is: **Health and Education in Challenging Times**.

Before you start

- Read all the instructions and revised guidelines.
- All abstracts must be submitted online.
- Provide all the information requested as part of the abstract submission process.

I. Introduction

Instructions for in-person and virtual presentations in the oral and poster categories will be available in a separate section on the Forum's website.

II. Authors

A researcher may be the first author in only **one** abstract but may appear as co-author in more than one. Only the first author or co-author can present the work at the Forum.

III. Eligibility Criteria

Faculty members, fellows, residents, students, and health professionals from the Medical Sciences Campus and other national or international Higher Education Institutions are invited to submit abstracts in **a diversity of research perspectives and methods in any of the categories listed in Section IX of this document**. Likewise, public, private and community organizations that offer health services or conduct research in related fields, are invited. Only completed and properly prepared abstracts will be considered for acceptance.

IV. Withdrawals

Abstracts submitted can be withdrawn **on or before February 22, 2023**, via an official written request to the Forum's Organizing Committee at the following email address: foroannual.rcm@upr.edu. The abstract and its related information will be deleted from the Forum's Abstract database.

V. Abstract Selection

Abstracts will be evaluated by at least two reviewers from faculty, clinicians, and researchers at the MSC and other institutions. The main criterion for evaluation will be the quality of the project, as reflected in the abstract. Evaluations will be made according to the following criteria: general objectives, consistency of the title with the content, information presented in accordance with the guidelines, relation with the selected category of the forum (see Section IX in this document) and inclusion of the elements requested in the general guidelines.

The Evaluation Subcommittee will submit recommendations to the Organizing Committee for final approval. The Organizing Committee reserves the right to reclassify submitted abstracts to the most appropriate category and type of presentation in accordance with the available spaces.

VI. Publication of Abstracts

All accepted abstracts will be published as submitted in a special digital issue, "Abstract Supplement," of the Puerto Rico Health Sciences Journal (PRHSJ).

VII. Notification of programming

Authors will receive notification of the status of their abstracts via e-mail, from **February 15 to 18, 2023**. Either the author or co-author **must** present the work in virtual or face-to-face modality, oral or poster, at the assigned date and time during the Forum.

VIII. Abstract Submission Instructions

- Abstracts **can be** submitted in either **Spanish or English**.
- Abstracts should be submitted online through the submission form:

<https://rcmonline.education/fororcm2023>
- Access the Call for Abstracts area and follow the instructions.
- The total length of the abstract should **not exceed 300 words**, excluding title, authors, affiliations, and acknowledgements.
- All abstracts must be received no later than **11:59 pm on January 18, 2023**.
- You must certify that co-author(s) and mentor(s) (if applicable) have read and approved the abstract before including their names on it.
- You must indicate if you wish to present your work in-person or in virtual modality. The organizing committee may change your request depending on availability of facilities.

IX. Submitting your abstract

A. Categories of works accepted

i. Research Project

- Quantitative, qualitative, or mixed assessment that describes scientific methodology application in relation to basic and applied sciences, epidemiology, or translational research.

ii. Educational/Community Projects

- Initiatives to examine the effectiveness or contribution of educational or community programs, practices, and policies, including the applications of technology to instruction and assessment, and community-based objectives. Educational/community demonstrative projects that focus on health promotion through innovative techniques or strategies.

iii. Case Reports

- A research modality that focuses on the characteristics, circumstances, and complexities of a sole case, often using multiple methods. The case is viewed as being valued on its own and while findings can raise awareness of general issues, the aim is not to generalize the findings to other cases.

iv. Health Policy Analysis

- Research that produces relevant information to support, modify, or reject a course of action to solve a public problem related to health and the health sciences. Policy analysis can be proposed from disciplines such as economics, political economy, history, sociology, geography, and ethics.

v. Evidence Based Practice Projects

- A project using the best available evidence, clinical expertise, and patient's (participant's) values and preferences for making decisions to improve outcomes for individuals, groups, communities, and organizations (Melnyk & Fineout-Overholt, 2015).

vi. Quality Improvement Projects (*New category*)

- Quality Improvement (QI) projects involve systematic, data-guided initiatives or processes designed to improve clinical care, patient safety, health care operations, services, and programs.

B. Abstracts must be organized into the required format based upon the abstract category, as specified below.

i. The abstract of a **Research, Educational, Community Project** should contain:

- **Background & Objectives**

- A brief description of the significance of the work presented. Include the study's aim/goal, the scientific question and hypothesis, if applicable.

- **Methods**

- Brief description of the study design, procedures, strategies, and/or activities.

- **Results**

- Summary of results (preliminary or final) obtained. It is NOT satisfactory to say: "The results will be presented or discussed."

- **Conclusion**

- A statement about the conclusions reached and future directions.

- **Acknowledgements**
 - Funding Source(s), Conflict of Interest Disclosures, etc.

ii. The abstract of a **Case Report** should contain:

- **Purpose**
 - A rationale for presenting the case.
- **Case description**
 - Clinical features of the case (including history and physical exam findings), clinical assessment, treatment plan, follow-up, and discussion of results.
- **Conclusion**
 - Should emphasize the learning points, implications for clinical practice, or future research.
- **Acknowledgements**
 - Funding Source(s), Conflict of Interest Disclosures, etc.

iii. The abstract of a **Health Policy Analysis** should contain:

- **Public Policy Under Analysis**
 - Identify the specific public policy to be analyzed.
- **Academic Discipline and Theoretical Framework**
 - Identify the discipline informing the analysis and, if relevant, the theory behind the research.
- **Sources of Information**
 - Present the information sources used in the analysis.
- **Research Methods**
 - Describe the research methods, according to the standards of the discipline previously identified.
- **Findings**
 - Present research findings. It is NOT satisfactory to say: “The findings will be presented or discussed.”
- **Implications for Public Policy**
 - Explain the relevance of these findings to support, modify or reject the public policy being analyzed.

- **Acknowledgements**
 - Funding Source(s), Conflict of Interest Disclosures, etc.

iv. The abstract of an **Evidence-Based Practice Project** should contain:

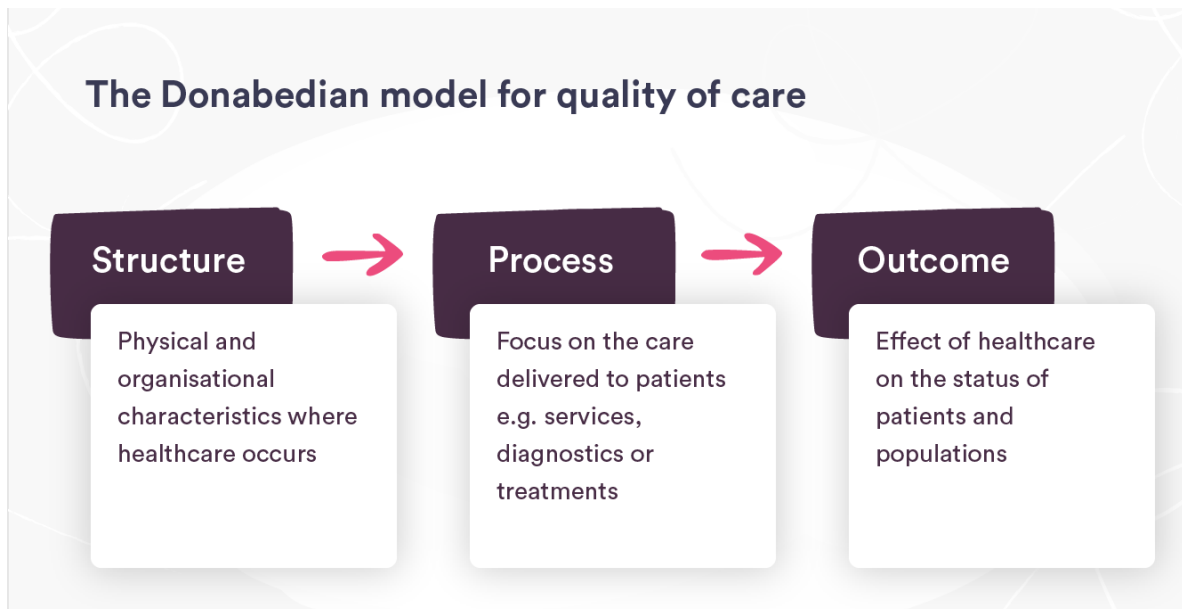
- **Clinical Question**
 - Include the evidence-based practice (EBP) question using Patient/Population, Intervention, Comparison, Outcome, Time (PICOT) format.
- **Scope**
 - Identify the problem, current practice, and relevance of the project.
- **Literature Review**
 - Summarize the evidence found in the literature that supports practice changes.
- **Project Implementation**
 - Describe the process used to implement the EBP project.
 - Present EPB project implementation findings. Present EBP project implementation findings. Projects without results or indicating that results will be presented will not be considered.
- **Practice Implication**
 - Explain the implications and recommendations for practice based on EBP project results.
- **Acknowledgements**
 - Funding Source(s), Conflict of Interest Disclosures, etc.

ii. The abstract of a **Quality Improvement Project** should contain:

- **Title**
 - Should summarize the abstract and suggest how the topic is relevant and important. Author names: See above for instructions on how to list authorship.
- **Introduction**
 - Is usually several sentences that outline the question addressed by the project. The first sentence should frame the issue. If possible, provide a concise review of what is and is not known about the problem being addressed, and how your project fills a gap. The final sentence should describe the initiative's purpose and include a clear aim statement listing the desired improvement target.

- **Methods**
 - Should describe 1) what QI measures (outcome/process/balancing (figure 1)) were used to evaluate the QI intervention; 2) what change(s) were implemented, and ideally an explicit rationale for why the proposed changes would be expected to solve the local QI problem; 3) detailed description of the iterative cycles of change used to implement the change(s); 4) analytic approach used to evaluate the impact of the intervention.
- **Results**
 - Provide a summary of the results.
- **Conclusion**
 - State concisely what can be concluded. This must be supported by data presented in the abstract. Describe the implications of the project findings. Include major limitations and future directions.
- **Acknowledgements:**
 - Show the appreciation for the people who contributed to the project.

Figure 1:



Assessed from: <https://blog.lifeqisystem.com/types-of-improvement-measures;>
<https://blog.lifeqisystem.com/define-aim-statement-quality-improvement>

- a) C. Abstracts should not contain Tables, Figures, or References.
- b) D. The abstract's title should contain a maximum of 150 characters, including spaces. The total length of the abstract should not exceed 300 words, excluding title, authors, affiliations, and acknowledgements. IMPORTANT: Any text longer than the specified number of characters will be rejected.**
- c) E. Write the following sentence if appropriate: "Approved by IRB or IACUC". (Make sure to include the protocol number(s) of approval in the IRB/IACUC box in the electronic abstract submission at the 42nd Forum Web Page).
- d) F. Sample Abstracts

Sample Abstract: Research Project

ApoE-ε4 has Mild, Negative Impact on the Cognition of Cognitively Healthy Puerto Rican Young Olds.

José R. Carrión-Baralt¹, Youssef Ahmad-Pereira², Mary Sano³, Irina Beshpalova³, Jeremy M. Silverman³. ¹University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico; ²Private Practice; ³Mount Sinai School of Medicine, New York, New York, United States of America

Background & Objectives: The apolipoprotein E ε4 (APOE ε4) allele is the sole major known genetic risk factor for late-onset familial and sporadic Alzheimer's Disease. It has also been associated with cognitive impairment and cognitive decline in non-demented elderly (especially young-olds, those people aged 60-74), but the strength of these associations has been shown to vary by cognitive domain, population and age group. We hypothesized that the cognitive performance of the ε4 carriers would be worse than that of non-carriers, especially in verbal memory and executive function tasks. **Objective:** This study sought to assess the impact of APOE ε4 on the cognitive performance of a sample of cognitively healthy Puerto Ricans aged 60 or above. **Methods:** The sample consisted of 141 subjects. The evaluation of neuropsychological performance was based on the CERAD battery and variables were aggregated by principal component analysis (PCA). Comparison of neuropsychological performance between ε4 carriers and non-carriers was conducted using a multivariate analysis of variance. **Results:** There were 39 ε4 carriers and 102 ε4 non-carriers. PCA resulted in a solution of six cognitive factors. APOE ε4 carriers performed significantly worse than non-carriers in the Episodic Memory, Processing Speed and Semantic Fluency factors and in overall cognition ($p < .050$ in all tests). **Conclusions:** Our results suggest that, in this sample of cognitively healthy Spanish-speaking young-olds, being an ε4 carrier is associated with worse cognitive performance. **Acknowledgements:** This research was supported by NIA grant 1 K01 AG025203.

Sample Abstract: Educational or Community Project

Recinto Pa' la Calle: An Alternate Approach to Medical Education Through Solidarity Service-learning.

Marcos G. Salgado¹, Sahily Reyes², Claudia S. Simich², Milangel T. Concepción³, Ramón E. Flores⁴. ¹ University of Puerto Rico, Medical Sciences Campus, School of Medicine, San Juan, Puerto Rico; ²University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico; ³Georgetown University Hospital, Psychiatry Residency Training Program, Washington DC, United States of America; ⁴University of Texas Health and Science Center, Texas, United States of America.

Background & Objectives: Outside classrooms and hospitals, medical students from the University of Puerto Rico have come across an alternate path of education through an initiative they have entitled “Recinto Pa’ La Calle”. A more humane patient–doctor relationship is sought, considering social determinants of health in the Puerto Rican urban setting. The objectives of this project are: 1) Provide experiences that develop relational skills and cultural competence. 2) Stimulate awareness among healthcare professionals on the importance of the social context of medicine. 3) Promote the education and empowerment of vulnerable populations. **Methods:** Every Monday night, a group of students reach out to people living in the streets near the Medical Center Area. Participants are provided with necessity goods, basic health education and simple conversation. Volunteers receive training from Iniciativa Comunitaria, a non–profit organization with vast experience working with marginalized populations. The theoretical model used, “solidarity service learning”, establishes a way of learning through community interaction and strategic reflection. **Results:** In this emotionally intense scenario, concepts of medical ethics have acquired new depths for students, motivating a richer understanding on what it means to practice medicine. The patient is acknowledged as a teacher and active participant in the healing process. **Conclusions:** It is our hope that this model of community service and medical education inspires change and encourages liaisons between academia and community. **Acknowledgements:** This effort is funded by the non–profit organization Iniciativa Comunitaria and volunteer donations.

Sample Abstract: Health Policy Analysis Project

La retórica de la participación democrática en el sector salud

Nylca J. Muñoz-Sosa, Luis A. Avilés. Universidad de Puerto Rico, Recinto de Ciencias Médicas, Escuela Graduada de Salud Pública y Ciencias Biosociales, Departamento de Ciencias Sociales, San Juan, Puerto Rico.

Política pública analizada: Se analiza la creación de un Consejo Multisectorial del Sistema de Salud, propuesto por el Proyecto de la Cámara 1185 (PC-1185), como mecanismo de participación democrática de los profesionales de salud para diseñar un sistema de salud universal en Puerto Rico (PR). **Disciplina o teoría:** La Comisión de Determinantes Sociales de la Salud (CDSS) advierte que la equidad en salud solo es posible con mecanismos de participación democrática. En PR cobra relevancia determinar la importancia que los diversos grupos del sector salud le confieren a la participación democrática y cómo la expresan retóricamente. Esta investigación se fundamenta en la aplicación de la retórica para el análisis de la política públicas, conforme al modelo de James Arnt Aune. **Fuentes de información:** Se analizan las ponencias escritas presentadas en las Vistas Públicas del PC-1185 que aluden a la democracia. **Método:** Se identificaron los argumentos relacionados con la democracia, sus premisas y falacias argumentativas. Se identificaron los grupos que sostienen posiciones argumentativas similares. **Hallazgos:** Un grupo heterogéneo apoyó la participación democrática, presentándola como una forma de producir un proyecto de país y trascender las influencias político-partidistas. Sus oponentes, principalmente el sector corporativo en salud y una sub-especialidad médica, recurrieron a argumentos de autoridad, apelaron al ridículo como fuente de argumentación y consideraron el Consejo Multisectorial propuesto incompatible con nuestro sistema de democracia representativa. **Implicaciones:** El sector salud está profundamente dividido en torno a qué es y qué implica la participación democrática, lo cual, según la CDSS, es un obstáculo para alcanzar equidad en nuestro sistema de salud. **Reconocimientos:** Ninguno.

Sample Abstract: Evidence Based Practice Project

Use of peripheral neuromuscular monitor for the evaluation of adult patient exposed to neuromuscular blockers during anesthesia

Virginia Fernández Paulino, Marta Rivero Méndez, Milagros Figueroa Ramos. University of Puerto Rico, Medical Sciences Campus, School of Nursing, Nurse Anesthesia Program, San Juan, Puerto Rico.

Clinical Question: In adult patients undergoing laparoscopic surgery with general anesthesia (P) How does the use of peripheral neuromuscular stimulator to monitor neuromuscular blockers (NMB) (I) compared to standard monitoring (C) affect occurrence of residual paralysis (O) during postoperative period?

Scope: In clinical practice, anesthetists use subjective methods (observation and patient movements) to estimate effects of neuromuscular blockers. Residual paralysis may occur if NMB are not monitored appropriately. **Literature Review:** Neuromuscular blockers are indispensable drugs for different surgical procedures. The cumulative and persistent effect of these during the postoperative period is known as residual paralysis. This causes patients to have respiratory complications, like hypoxemia and acute respiratory failure. The recommended EBP is that PNS should be used as a method of objective monitoring. **Project Implementation:** This project was conducted in the preoperative, surgical and postoperative areas of a Metropolitan area hospital. Demographic data, neuromuscular response, and PNS train of four (TOF) on *adductor pollicis* nerve were documented. Additionally, the patient was observed to identify signs of residual paralysis. **Results:** Ten subjects, with a mean age of 44 participated. None of the participants presented signs of residual paralysis after being monitored with TOF. There was no airway obstruction, moderate or severe hypoxemia, signs of respiratory distress, or inability to breathe deeply or the need for re-intubation. **Practice Implication:** Performing TOF measurements with PNS throughout the anesthesia process is a simple practice that minimizes the risks of residual paralysis, allowing adequate recovery at the end of surgery.

Sample Abstract: Quality Improvement Project

Improving Human Papilloma Virus Vaccination Rates: Quality Improvement ¶

Michelle Bowden, MD^{1,2}; Jason Yaun, MD^{1,2}; Bindiva Bagga, MD^{1,2} Le-Bonheur Children's Hospital¹, and Department of Pediatrics², University of Tennessee Health Sciences Center, Memphis, Tenn. ¶

Background: Human papilloma virus (HPV) is a sexually transmitted infection with a national prevalence of greater than 70 million. Most infections are among persons 15–24 years of age. The HPV vaccine has nearly 100% efficacy when administered before natural exposure. However, national vaccination rates remain less than 50%. Our objective was to improve the rate of initiation of the HPV vaccination series in a resident teaching practice. **Methods:** We used the Plan-Do-Study-Act methodology for quality improvement. Eligible patients included children 9 through 13 years of age who presented to a general pediatric clinic. We established baseline data by reviewing HPV immunization rates taken from a convenience sample of ≤ 20 patients per month over 7 months. A key driver diagram guided interventions including resident communication, nursing staff education, family knowledge, and an electronic medical record prompt beginning at age 9. Using standard run chart rules, we plotted monthly postintervention vaccination rates over 7 months of data collection. **Results:** Baseline data included 136 patients age 9–13. Run chart monitoring revealed an increase in our HPV vaccination rate from 53% at baseline to 62% by October 2015. Additionally, we observed a statistically significant increase in mean vaccination rates from 50% to 69% (odds ratio 2.071; $P=0.0042$). We noted an increase in vaccination rates after resident education initiatives and after implementation of an electronic medical record prompt. **Conclusions:** Simple and practical interventions involving residents led to a marked increase in HPV vaccination in our patient population. ¶



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