



## Instruments to implement teleworking in a scientific journal editing projects

### Instrumentos para implementar el teletrabajo en proyectos sobre edición de revistas científicas

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#### ABSTRACT

**Introduction:** There is no system of methodological instruments useful for the control and operational management of immediate tasks aimed at editing and publishing the scientific results of teleworkers.

**Objective:** To develop the general and preliminary structure of the main instruments used in the management of teleworking in the institutions subordinated to the Cuban Health System that ensure the edition of scientific journals.



**Methods:** An inductive qualitative descriptive study was performed. Teleworking was conceived at a small scale, using a pilot study carried out at General Calixto García University Hospital in the period between September 2019 and October 2023. Methodological triangulation was applied. In the sampling strategy, those questions or doubts to be explored were selected on the basis of the state of knowledge about teleworking and the opinions given by expert teleworkers who participated in the study.

**Results and Comments:** The teleworking reporting model is described, along with the technical instructions for its implementation, the questionnaire for interviews with decision-makers and experts in the public health sector, and their responses on the subject.

**Conclusions:** The main basic instruments used in the management system for teleworking presented here, provide a perception of management success by demonstrating that teleworking or remote work can be more accessible for those who manage the editing of scientific journals.

**Keywords:** organization and administration; public health; periodicals as topic; surveys and questionnaires; teleworking.

## RESUMEN

**Introducción:** No existe un sistema de instrumentos metodológicos que permita gestionar y controlar de forma operativa, las tareas inmediatas para editar y publicar resultados científicos a quienes teletrabajan.

**Objetivo:** Elaborar la estructura general y preliminar de los instrumentos del sistema de gestión del trabajo a distancia, para instituciones del sistema de salud cubano, que cuenten con edición de revistas científicas.

**Métodos:** Investigación descriptiva, con enfoque cualitativo e inductivo. Se concibió la implementación del teletrabajo a pequeña escala, mediante el pilotaje realizado en el Hospital Universitario "General Calixto García", en el período de septiembre 2019 a octubre de 2023. Se aplicó la triangulación metodológica. En la estrategia de muestreo, se seleccionaron las interrogantes o dudas a explorar, basadas en el estado del conocimiento analizado sobre teletrabajo, además de los participantes expertos en teletrabajo.



**Resultados y Comentarios:** Se describe el modelo de reporte de teletrabajo, junto con el instructivo técnico para su implementación, así como el cuestionario para entrevistas a decisores y expertos del sector de la salud pública y sus respuestas sobre la temática.

**Conclusiones:** Los instrumentos básicos, fundamentales del sistema de gestión del teletrabajo, proporcionan percepción de éxito gerencial; facilitan que el teletrabajo sea más accesible para quienes dirigen, en la edición de revistas científicas.

**Palabras clave:** encuestas y cuestionarios; organización y administración; publicaciones periódicas como asunto; salud pública; teletrabajo.

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## INTRODUCTION

In the previous research conducted by these authors,<sup>(1)</sup> the need to carry out a methodological approach to the useful instruments needed for hospital management, which should be part of the projects in the management systems for teleworking or simply, remote work (TW-RW), as well as the technical and administrative requirements indispensable for its implementation, were introduced and resolved.

In the present study, the problematic situation is defined as the lack of a system of methodological instruments useful for hospital management that allow to manage and control, in an operational manner and with a sense of certainty, the immediate and long-term tasks aimed at editing and publishing the scientific results of teleworkers.

The way the design of instruments would facilitate the management of teleworking in order to achieve an effective performance of administrative and hospital management, especially in those services where human behavior enables a higher organizational culture has been identified. Additionally, the contributing factors are expected to be effective for the implementation of teleworking. The institutional context, which has currently been facing a lot of post-pandemic lacks and a diversity of assumptions and

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uncertainties, has demanded the use of different techniques for the collection and processing of information.

The objective of the present research study consists in developing the general and preliminary structure of the fundamental instruments necessary for the management of teleworking or remote work in those institutions subordinated to the Cuban Health System, which among other functions, include the publication of scientific journals.

## METHODS

An inductive qualitative descriptive research was conducted under the constructivist-interpretative paradigm. It provides continuity and forms part of the institutional research project approved in 2019 under the title: “Modeling of teleworking in the editorial management and teaching in the virtual environments of General Calixto García University Hospital.

It was conceived to explain - with the proper rationality - the implementation of teleworking at a small scale, or by using the pilot study carried out at General Calixto García University Hospital in the period between September 2019 and October 2023. The aforementioned actions made possible to unveil the contradictions that slow down the expansion of teleworking from homes or any other emerging working spaces, as well as the compilation of existing experiences about the different forms used for the implementation of management systems of teleworking in Cuba.

Theoretical context: Plenty of literature specialized on Teleworking or Telecommuting (working remotely, but sometimes connected to a shared workplace or office), or Remote Work (working outside a traditional on-site location that can be conducted anywhere with no need to be connected to an office), which are developed at a global level or according to the geographical area where it is developed, has been evaluated; also, the existing controversy regarding the kindness and deficiencies of such types of work has also been taken into consideration. Experience gained in the area related to the implementation of systems for the management of teleworking in Cuba were obtained. Moreover, lots of academic works carried out to complete final or Master’s degrees in this direction in the Latin American region were also



analyzed; however, the level of legislation has been evaded due to the high level of specialization and distance of the desired objectives.

The practical instruments for its design should be part of the teleworking projects, which should also emerge as appropriate tools for the performance of project management groups for the development of editorial work, particularly, in every secondary or tertiary health care institution where it is required.

**Rationality:** Particular attention will be paid to the level of rationality, so the study has been restricted to the management activity of scientific journals in the hospital units under study, and as a pilot study carried out to draw inferences or generalizations about its implementation in other activities or hospital areas.

**Methodological triangulation:** The combination of the methodological design with the sampling and analysis of transliterated speeches has been conceived. Similarly, the triangulation of the different points of view obtained from the interviews performed has been carried out.

**Sampling strategy:** The participants and the doubts or questions that needed to be explored, which were based on the analysis of the state of knowledge about teleworking, were selected.

**Expert sampling:** Participants from other areas outside the study unit were involved in the sampling due to the lack of experience in relation to the implementation of this work modality in medical institutions, with the aim of organizing the necessary elements for the design of the questionnaire that will enable its implementation in the hospital in the future.

**Target population:** It was designed to study the opinions of those participants who were considered as experts and decision-makers for the implementation of teleworking in some important units of the biomedical sector.

To conduct the interviews, 4 experts or key informants from the biomedical sector were selected under the following inclusion criteria: working in this sector; having a solid academic or technical training; holding a Master's or Doctoral Degree; being professors and researchers with a vast teleworking experience, and /or with proving experience in the publishing sector. Various specialists from the sector were excluded, since they did not accept to be interviewed because of different reasons, mainly because they were found themselves in the midst of urgent tasks.



Subsequent to the interviews performed, the quantification of the frequency of contributing factors or those factors that slow down the implementation of teleworking was established, considering the future implementation of another similar online tool.

Criteria for the definition of the purpose of sampling: Temporary availability of up to 30 days and thematic saturation of the model responses were taken into account. The possibility to obtain more than 3 temporarily defined negative or evasive answers on the part of experts from top management centers from the unit under study was also considered. The variables included the identification of the contradictions that slow down the expansion of teleworking. They contrast different responses or points of view to all the questions under analysis, that is, the variables in favor or against the implementation of teleworking (details available as Complementary Files).

Characteristics of the researchers that participate in the present study: All the participants are highly qualified professionals: members of the current team who have interacted with the persons surveyed or have investigated and been actively involved in the production of knowledge about the teleworking modality. Part of this group of researchers have participated in the aforementioned pilot study since the isolation time imposed by the COVID-19 pandemic in 2020, and the main researcher has 10 years of teleworking experience.

Reflexivity: The personal attributes to address the points of view and content of these speeches, as well as the experience and good relationships among participants who must have the necessary skills to interview decision-makers for the implementation of teleworking, should influence on the results of the study.

Supposed risks: They are concentrated on the controversy and lack of knowledge about the topic besides the controversy in relation to the topic, which had been little applied in Cuba before the pandemic, as well as the need to postpone the interviews from decision-makers until the inability to carry them out. With the aim of minimizing the risks for carrying out the collection of responses, the interview was first applied using WhatsApp multiplatform messaging App. Subsequently, online surveys were developed in order to corroborate and quantify the priori analysis of the text in the near future.



Modifications in the procedures were made in response to the development of the research work. Triangulation and Rationality were the most useful techniques for the improvement of the reliability and analysis of data.

Empirical methods: Primary interview questionnaires for data collection were applied to potential teleworkers. Teaching and Research Department Meetings were held to give detailed information about the characteristics of the study and the need for their collaboration. The study was then approved by the above-mentioned Department, and that of the Scientific Council of the Hospital.

Theoretical methods such as: historical-logical, analysis-synthesis, and inductive-deductive ones were also used for the analysis of the main definitions, according to the origin of the institutions and authors. The results of similar research works, such as that entitled: were also consulted.<sup>(13,14,15,16,17)</sup>

Processing of data: The processing methods used before the analysis included a questionnaire with closed and semi-open questions, as well as the results obtained from different international investigations on the topic, mainly those found in the Latin American region, so that they can be evaluated in the Cuban context.

### **Performed analyses**

Integrity was verified after the collection of data and the transcript of answers, and the analysis of data was processed to make inferences. New topics like the necessary assurance for teleworking were suggested, and the variables towards the implementation of teleworking were identified in their vast majority.

Finally, it was determined that the auxiliary areas dedicated to the regulation and control should evaluate, adjust, and conclude the definitive design of the System Procedure Manual<sup>(18)</sup> according to the instruments designed and the best universal practices of corporate management, including the use of surveys and interviews.

Ethical aspects of human subjects: The reliability or anonymous character of the opinions expressed in the interviews was guaranteed. The Research Ethics Committee approved the documentation of the research project, which complied with all the basic ethical principles of scientific research: beneficence, non-maleficence, justice, and autonomy.



## RESULTS AND COMMENTS

The basic instruments for the implementation of Teleworking were created (detailed instruments are available as supplementary files to the article, under license [Creative Commons](#)):

- Interview questionnaire applied to decision-makers from the Health Care System who responded as experts or participants that are knowledgeable about the topic. Three answers were compiled with explanatory arguments that responded to 10 questions with both affirmative and negative answers. Question 11 has 7 items, which are equally approved or disapproved.
- Online survey questionnaire, using Google Forms, available during 2024 first trimester (January – March)  
<https://docs.google.com/forms/u/0/d/1d69tdJVWzi34u9n3mLa8QWdt4TJK8XN4cBENXzATyh/w/closedform?hl=es-419>
- Survey to obtain essential data from potential teleworkers, which was applied and developed in Excel tables before the conduction of the study (pandemic period 2020-2022). It included personal and location data of each teleworker such as name, last name, position, and e-mail, among others that could be useful for immediate location. This will provide a list of available administrative and technical requirements, which must be selected in the case that a person becomes a teleworker or a remote worker.
- Work report model for Teleworking or remote work (TW-RW): It was designed in Excel tables to inform the activities, tasks and the total time developed by every teleworker on the basis of a structured methodology for the calculation of the load balance and work capacity.
- Methodology of balance between load and work capacity designed for the positions approved for the Editorial Work of the journal: Archivos del Hospital Universitario “General Calixto García”, together with part-time teaching and research activities resulting from the Appendix included in the previous instrument about the Work Report Model developed in Excel tables.
- Technical instructions to fill out the Teleworking Report.

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The different instruments evaluated can be used both inside and outside the public health sector or in work groups that carry out the functions linked to public information agencies in charge of the editing and publication of different kinds of information that mainly have a scientific and/or technological character.

Once such instruments were available to hospital management, the support given by the direction policy of each entity should be expected, so that they can be feasible and improved. A certain adequate perception of the practical and daily usefulness of teleworking should be attained, and the creation of higher ethical values should be provided, since they strengthen the organizational culture of the entity where it is implemented. If the institutional work or the work carried out by those entities belonging to the health system is organized without taking into account the potentialities of the modality “Organization of Teleworking”, the low effectiveness and efficiency of the current organization, and even the current weaknesses with regard to the conciliation of work and family life would not be overcome.

During the pandemic period, low response to the instruments was given due to its complexity and poor understanding. In that stage, a pilot test was applied in a surprise move because of the isolation imposed by the sanitary authorities, and it was not possible to carry out a face-to-face training course for the explanation of its implementation.

The analysis of the compiled answers showed an almost unanimous consensus in favor of the implementation of teleworking. Only 3 of the 56 answers given by the three interviewed experts, offered little doubts about the feasibility of such modality with regard to questions 6, 8, and 10, for being expressed as negative answers.

After the analysis of a study carried out in Spain during the COVID-19 pandemic,<sup>(19)</sup> the transfer of control mechanisms of many businesspeople towards the face-to-face environment was found to be an expression of reticence of losing the direct control of their employees, regardless of the working results. However, the three-quarters of the respondents expressed that they carried out their activities with no new tools for the control of their performance, and in connection with what was determined by the first question in the recent interviews in relation to the control of subordinates or collaborators.



Other research about teleworking conducted in a Colombian enterprise,<sup>(20)</sup> highlights the possibility of improving the work environment and organizational values such as quality, professionalism, seriousness, and industriousness, among other values that certify the findings of a study about the impact of teleworking on productivity and work satisfaction. Its results confirm the advantage in the reduction of costs, and the possibility to have highly qualified remote talent from anywhere in the world to support the design and optimization of finished products, besides the increase of motivation and productivity.

Regarding this and other advantages such as the reduction of costs, similar responses were found, such as: “it means savings and optimization of all kinds of expenses”; “it is a more efficient management of human resources”; “concerning transportation problems, working from home represents a great advantage, but there are no differences in relation to the amount of work that has to be done”.

On the other hand, regarding the selection of the most sacrificed persons when referring to face-to-face workers and teleworkers, where the multiple roles that teleworkers must fulfill during their working day were highlighted; that is, for example, the case of those mothers or caregivers who deal with the overloads that working within the home environment may involve. Other expenses, which include the payment of electricity and mobile internet connection, were also emphasized. The thesis published by the University of Montevideo, Uruguay, presents a similar problem when it points in its results to those who claim to spend more on electricity when teleworking, although they save in transportation expenses.<sup>(17)</sup>

The most obvious limitation of the current study is that it was limited only to the hospital work group in charge of editorial functions.

For this kind of initiative, the design and implementation of teleworking projects is suggested as a collective and collegial work; that is, the instruments and their implementation procedures are the responsibility of the specialists of auxiliary areas for regulation and control, with the protagonist implication of all the participants involved. Therefore, the remaining instruments designed for their interconnection with the system should be continued in a subsequent research report, since they can exist at present, but in an isolated manner.

The main basic instruments used in the management of teleworking shown here, provide a perception of management success by demonstrating that teleworking can be more accessible for the directors of



institutions subordinated to the Cuban Health System, which among other functions, are in charge of editing scientific journals.

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### **Conflict of interests**

The authors have no conflicts of interest to declare

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