THE COLLABORATION OF THE ECDC LIBRARY IN THE PURSUIT OF *EUROSURVEILLANCE* IMPACT FACTOR

Escriva, Ana-Belen, Medical Librarian; Steffens, Ines, Managing Editor *Eurosurveillance*

European Centre for Disease prevention and Control (ECDC) Stockholm, Sweden
Ana-Belen.Escriva@ecdc.europa.eu

ABSTRACT

The *Eurosurveillance* editorial team has been implementing changes to its journal to enhance its quality to become a leading publication in communicable diseases. The ECDC Library collaborated in this aim by finding the *Eurosurveillance*[1] unique characteristics with the purpose to submit the journal for evaluation in September 2008 for having an impact factor. We analysed the website about the journal selection process by Thomson Scientific together with their literature published about the quality and selection process of the journals. We obtained information to design a set of quality and quantity indicators to apply to *Eurosurveillance* according to the Thomson Scientific requirements: basic journal standards, editorial content, international diversity and regional scholarship, and citation analysis. The indicators pointed the *Eurosurveillance* accomplishment of these characteristics considered as core in the evaluation process such as timeliness and internationally. In addition, the indicators highlighted those unique features that make *Eurosurveillance* unique among other journals in the same subject field: the rapid peer reviewed communications; the articles concerning infectious diseases events and trends in Europe and worldwide; and the potential threats to health for the EU population. The information obtained from the indicators allowed us to elaborate a comprehensive description of *Eurosurveillance* to submit in Thomson Scientific evaluation form, focussing on the journal unique features.

AIM

Journals indexed in *Web of Science*® have an impact factor[2]. The impact factor is a commonly known citation analysis that assesses the impact of a journal, author, and work among the scientific community.

---

[1] *Eurosurveillance* is a scientific peer reviewed journal which covers the epidemiology, prevention and control of communicable diseases. *Eurosurveillance* is a weekly online publication free of charge both for readers and authors. The journal has more than 14,000 electronic subscribers worldwide. A selection of electronic articles are published in a quarterly paper edition of the journal which is intended for promotional reasons only and releases 6,000 copies. The whole collection is available on the *Eurosurveillance* website at http://www.eurosurveillance.org/.

[2] In citation analysis, a quantitative measure of the frequency with which the "average article" published in a given scholarly journal has been cited in a particular year or period, developed by the Institute for Scientific Information (ISI) for use in *Journal Citation Reports*®, a multidisciplinary tool for ranking, evaluating, and comparing journals within subject categories. The indicator is used by serials librarians in collection management, journal publishers in marketing, information analysts in bibliometric research, and authors to identify journals in which to publish. “Impact factor”. In: Reitz JM. ODLIS: online dictionary for library and information science [dictionary on the Internet]. Santa Barbara, CA: Libraries Unlimited, c2004-7 [cited 29/03/2009]. Available from: http://lu.com/odlis/

In order journals to be indexed in *Web of Science*®, previously they need to be submitted for evaluation. The journal selection process is explained in the Thomson Scientific website[3]. It covers the justification of the need of the impact factor as a measure to evaluate the spread and impact of the scientific literature within the scientific community, the evaluation process and the features that Thomson Scientific takes into account for the evaluation of a journal.

Basically Thomson Scientific is seeking the uniqueness of the journals contained in *Web of Science*®. The idea behind this objective is to index in *Web of Science*® those journals that are core in the scientific literature in one or several subject categories based in the Bradford's Law.

Bradford demonstrated that only a relatively small number of journals publish the main scientific results. Thomson Scientific pretends to index in *Web of Science*® those journals that are core in the scientific literature in a particular subject putting into practice the impact factor as an indicator to measure the scientific spread of the contents of the articles contained in the journals.

It is important to call the attention that in the journal evaluation process Thomson Scientific not only takes into consideration the four main categories of the journal analysis but the subjective judgement of experts on the field which counts with the help of an editorial advisory board, staff specialists, subscribers, editors and publishers.

The selection process of a journal can be summarised with the following equation[4]:

Citation data + Editorial basic standards =
Information about the journal coverage decision
+
Subjective judgement of experts on the field
=
Journal selection decision

METHOD

Thomson Scientific provides an application form to submit journals for evaluation[5]. The publisher should submit the journal identification data such as title, ISSN, editor-in-chief, address, journal scope, frequency, url, etc and the contact details. Among the fields of the submission form there is the "Unique features distinguishing this journal" field which we considered as crucial. The Thomson Scientific aim is only to index journals in *Web of Science*® whose characteristics make them different from the rest of journals already indexed. Therefore we considered that this field should contain a

[3] Thomson Reuters [homepage on the Internet]. New York, NY: Thomson Reuters; c2009 [cited 29/03/2009]. The Thomson Scientific journal selection process; [about 2 screens]. Available from: http://thomsonreuters.com/business_units/scientific/free/essays/journalselection/

[4] Garfield, E. How ISI selects journals for coverage: quantitative and qualitative considerations. Essays of an Information Scientist. 1990;22:185-193.

[5] Thomson Reuters [homepage on the Internet]. New York, NY: Thomson Reuters; c2009 [cited 29/03/2009]. Journal submission form; [about 1 screen]. Available from: http://science.thomsonreuters.com/info/journalsubmission/

detailed description covering all the requirements taken into consideration during the evaluation and highlight the unique features of the journal.

The *Eurosurveillance* editorial team and the ECDC Library (ECDCL) noticed that before submitting the journal for evaluation, an in-depth analysis of the journal should be done in order to detect and list all the unique features that differentiate *Eurosurveillance* from all the journals already indexed in *Web of Science*®.

The ECDCL and the *Eurosurveillance* editorial team created a positive collaboration in the aim to submit the journal for evaluation because we have a different perspective of the journals environment. On one hand, the ECDCL staff has a wide knowledge about the complexity of the scientific journals market, the journal quality assessment and citation analysis. On the other hand, the *Eurosurveillance* editorial team is aware about other journals whose editorial content is similar to their own journal and also becomes the main source of information providing comprehensive data about their journal. This background put the basis for a positive synergy and exchange of information to achieve a proper description for the unique features of *Eurosurveillance*.

From this point, two main questions raised in the common work of ECDCL and the editorial team:

1. Which requirements does Thomson Scientific seek in the journal evaluation?
2. How does *Eurosurveillance* match the Thomson Scientific requirements for the journal evaluation?

From a first sight, the answers to these questions could be fast and easily answered. However our aim was to analyse thoroughly the Thomson Scientific journal selection process. The result to this analysis could lead us to fill the “Unique features distinguishing this journal” field highlighting the unique and core characteristics taken into account during the process.

Figure 1 explains in a diagram the workflow between *Eurosurveillance* editorial team and the ECDCL further developed in the next sections:

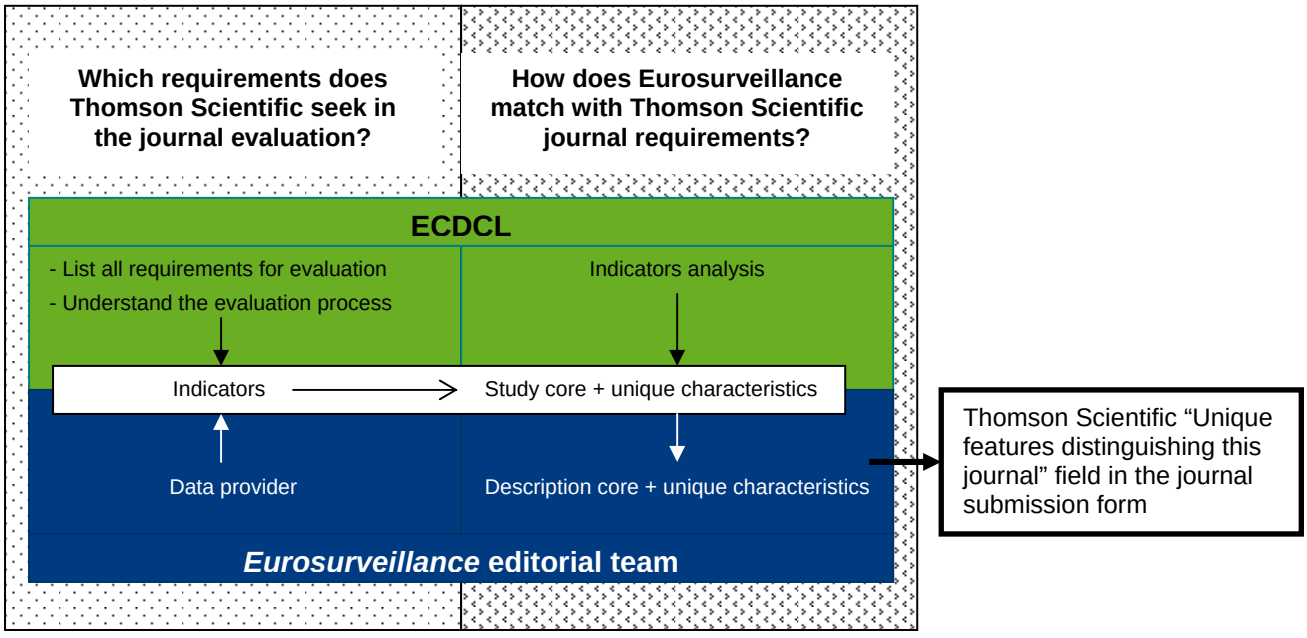

Figure 1: Cooperation between *Eurosurveillance* editorial team and the ECDCL in finding the requirements for submitting for evaluation *Eurosurveillance*.

The Thomson Scientific requirements in the journal evaluation

The editorial team and the ECDCL were concerned about the requirements for the journal evaluation process. It was important to know them in detail to add them in the description of the unique features in the evaluation submission form.

Our aim was to break down the initial information provided in the journal selection process website. This information was competed by reading their literature published about the quality and selection process of the journals, allowing us to understand how Thomson Scientific makes the journal evaluation.

This first step process helped us to foresee the Thomson Scientific requirements in the journal evaluation. The characteristics taken into consideration and analysed are grouped in four main categories:

- Basic journal standards (includes timeliness, international editorial conventions, language and peer reviewed process)
- Editorial content
- International diversity (takes also into consideration the regional scholarship)
- Citation analysis (takes also into consideration the self-citation)

These characteristics are not only applied for print journals but also for electronic journals. However there is a specific section for evaluation of electronic journals due to the special characteristics in the layout. Hence the format of the electronic journals is extremely important during the journal evaluation.

None of the characteristics is evaluated by itself. It is the combination and the interrelation of the data obtained which helps to determine the journal's strengths and weaknesses. Nevertheless there are some of these evaluated features which are considered as core.

The core requirements are those considered by Thomson Scientific as compulsory to fulfil. The timeliness, the international diversity of the journal or a high rate of self-citation are examples of core requirements. The unfulfilment of any of them rejects automatically the journal from the evaluation process. Thus *Eurosurveillance* should remark among the requirements the fulfilment of the core characteristics.

The result of making this first analysis by the ECDCL was the design of different sets of quality and quantity indicators to apply to *Eurosurveillance* according to the four main categories of journal requirements (basic journal standards, editorial content, international diversity and citation analysis) plus the specific for electronic journals.

The *Eurosurveillance* editorial team and the ECDCL agreed in the final sets of indicators to apply according to the Thomson Scientific journal evaluation analysis the *Eurosurveillance* data that we could apply.

How Eurosurveillance matched with Thomson Scientific journal requirements for evaluation

The indicators were organised in sets according to the Thomson Scientific four main categories plus the specific for e-journals. Next we are presenting the indicators we applied in line with the information obtained from the Thomson Scientific journal selection process and the bibliography read[6].

Thomson Scientific category		**Indicators**
Basic journal standards	Timeliness	Punctual periodicity of *Eurosurveillance* in its electronic version.
	International editorial conventions	International editorial convention fully followed.
	Language	If *Eurosurveillance* publishes articles in other languages than English, analyse which parts of the record are being translated into English.
	Peer review process	State peer review process.
Editorial content		Strengths of the journal that makes it unique.
International diversity		• Geographic origin and institutional affiliation of *Eurosurveillance* editors and the editorial board. • Geographic origin and institutional affiliation of *Eurosurveillance* subscribers. • Diffusion of *Eurosurveillance* in bibliographic databases (especial emphasis in Thomson Scientific products), library catalogues and journal repertories and directories. • State the regional scholarship.
Citation analysis		• How often and the title of the journals (especial emphasis with the journals indexed in *Web of Science*®) the editorial board members have published their literature production. • Analysis of the top 5 most cited articles published in *Eurosurveillance* (especial emphasis with the journals indexed in *Web of Science*®). • Rate of self-citation.
Electronic journals		• Each article must be assigned a unique page number or article number (one or the other is required; article number other than DOI) within each issue in a volume. Article numbers must be unique within an entire volume number. • Label all article identifiers such as DOIs, PIIs and article numbers. • A complete table of contents for each issue that includes the page/article number for each article (unless journal is being

[6]Garfield, E. How ISI selects journals for coverage: quantitative and qualitative considerations. Essays of an Information Scientist. 1990;22:185-193.
Garfield, E. Idiosyncrasies and errors, or the terrible journals do to us. Essays of an Information Scientist. 1983;6:6-12.
Garfield, E. To indent or not to indent? How to improve journal contents page formats. Essays of an Information Scientist. 1977-78;3:267-270.
Garfield, E. What a difference an "A" makes. Essays of an Information Scientist. 1979-80;4:208-215.

	published as single articles). • Provide to the contributing authors instructions to show them how to cite the electronic version of *Eurosurveillance* journal. • Fully descriptive article titles and abstracts. • Complete bibliographic information for all cited references. o Include full bibliographic information of the article on the first page. o Bibliography placed in a standard location within the journal. Not recommended at the very end of the journal issue. o Interspersion of notes, comments or additional explanations in cited references. Organisation of the references and notes within the article. o Standard reference style used and ensure that the style is being used correctly in the references. o False publication dates created by the different editions and supplements of a journal. • Authorship o Provide full postal address and email of the author's affiliation on the first page in all sorts of contributions within the journal (i.e. articles, reprints, technical reports or letters). o When multiple authorship of an article, state clearly which author belongs to its working institution. o Authority control of the authors' names in order to avoid the misspelling and further mistakes whenever another author cites the article published in the journal.

The application of the indicators enabled us to make an analysis and recognise those features that should be mentioned in the description according to the four main categories taken into account during the Thomson Scientific journal evaluation.

The analysis became a useful for the *Eurosurveillance* editorial team to elaborate a comprehensive description of the unique characteristics to add in the submission form. In addition, it allowed making a detailed list of those other characteristics that were taken into consideration in the journal evaluation process.

RESULTS

The description resulting from the analysis was included in the "Unique features distinguishing this journal" field in the Thomson Scientific submission form for journals evaluation. The description of the unique and core characteristics of *Eurosurveillance* had 453 words.

Next we are presenting a summary of the features mentioned in the description according to the four main categories:

- Basic standards:
    - Remarked that the editorial team was submitting for evaluation an e-journal to clarify the punctual timeliness of its issues
    - Used Vancouver style
    - Used English language

    - Employed double-blind peer reviewed process
- Editorial content:
    - Released rapid peer reviewed communications
    - Released Euroroundups
    - Provided innovative research in specific infectious and emerging diseases
    - Provided articles concerning infectious diseases events and trends in Europe and worldwide, and potential threats to heal for the EU population
    - Composed editorial board by leading public health experts from national institutes in the European Union Member States, Iceland, Norway, Croatia, Turkey, former Yugoslav Republic of Macedonia, the WHO Regional Office for Europe and the European Commission
- Explained the regional scholarship of the journal and the international origin of the editorial board members, worldwide subscriptors, and the presence of *Eurosurveillance* in a wide range of bibliographic databases, library catalogues, repertories and other free resources used in research
- Most cited scientific journal in Promed (http://www.promed.org/) in 2007 and one of the main sources of information for the global Health Map (http://www.healthmap.org/en)

DISCUSSION

The two initial raised questions regarding to the Thomson Scientific journal requirements and how *Eurosurveillance* was fulfilling these requirements put the basis for the work interaction between the ECDCL and the editorial team.

The questions could be answered due to the different approach to journals between ECDCL and the editorial team. The key of our collaboration was the expertise provided from ECDCL in quality assessment of journals and citation analysis, and the editorial team as a data provider of their own journal and their awareness of other journals with a similar editorial content to *Eurosurveillance*. The ECDCL and the *Eurosurveillance* editorial team provided input in the analysis from each one's perspective and its convergence led to fulfil the answers to the two initial questions raised for submitting *Eurosurveillance* for evaluation.

It was very useful to analyse the journal selection process in Thomson Scientific website and the bibliography read before defining the indicators. This point of the research was crucial for understanding the evaluation process in order to guarantee in the description the unique elements to highlight according to Thomson Scientific parameters.

Our synergy is also reflected by agreeing in the indicators to apply. In most of the cases, the indicators applied were suitable to obtain the information needed. However, as an example, the self-citation was difficult to apply because we did not have the possibility to obtain the information to make the calculations. Nevertheless a big amount of the requirements could be evaluated with indicators. The data provided by the *Eurosurveillance* editorial team together with the ECDCL work using the *Science*

Citation Index® were sources of information big enough to obtain the information to apply in most of the indicators.

In contrast, it was unnecessary to apply in detail the indicators because the information provided in the description would be a general statement. For example, we considered that it was irrelevant to analyse in detail the scientific production of the advisory board in order to make them the citation analysis.

CONCLUSIONS

To sum up, submitting a journal with all the requirements does not guarantee that it will be indexed in *Web of Science*®. There is the component of the subjective judgement of the experts on the field and in the evaluation process the citation analysis is exhaustive. It should be mentioned that the citation analysis is not fully specified in Thomson Scientific website neither in the bibliography used. However it was unnecessary to go into a deeper analysis for the description of the unique features of *Eurosurveillance*.

Independently of the result of the Thomson Scientific evaluation, it was demonstrated that the cooperation of the ECDCL and the *Eurosurveillance* editorial team was successful since we achieved to list the unique features according to Thomson Scientific requirements. The combination of our knowledge and experience had a valuable asset to reach our aim.

This experience of cooperation between the ECDCL and the *Eurosurveillance* editorial team is also an evidence of how a library can provide support to other departments within an organisation in a very specific domain.

REFERENCES

1. Reitz JM. ODLIS: online dictionary for library and information science [dictionary on the Internet]. Santa Barbara, CA: Libraries Unlimited, c2004-7 [cited 29/03/2009]. Available from: http://lu.com/odlis/
2. Thomson Reuters [homepage on the Internet]. New York, NY: Thomson Reuters; c2009 [cited 29/03/2009]. The Thomson Scientific journal selection process; [about 2 screens]. Available from: http://thomsonreuters.com/business_units/scientific/free/essays/journalselection/
3. Garfield, E. How ISI selects journals for coverage: quantitative and qualitative considerations. Essays of an Information Scientist. 1990;22:185-193.
4. Thomson Reuters [homepage on the Internet]. New York, NY: Thomson Reuters; c2009 [cited 29/03/2009]. Journal submission form; [about 1 screen]. Available from: http://science.thomsonreuters.com/info/journalsubmission/
5. Garfield, E. Idiosyncrasies and errors, or the terrible journals do to us. Essays of an Information Scientist. 1983;6:6-12.
6. Garfield, E. To indent or not to indent? How to improve journal contents page formats. Essays of an Information Scientist. 1977-78;3:267-270.

7. Garfield, E. What a difference an “A” makes. Essays of an Information Scientist. 1979-80;4:208-215.