

# Initial experience with developing communities of practice around the National electronic Library for Communicable Disease

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## ABSTRACT

The availability of the Internet among healthcare professionals in the UK in recent years has made online professional communities a viable vehicle for their professional communication, an information source for their everyday needs and an easy way of disseminating and sharing information. Busy healthcare professionals around the country can take advantage of online communities, which are becoming very popular and powerful alternatives to traditional personal ones.

This paper discusses and defines the role of the NeLCD (National electronic Library for Communicable Disease, <http://www.nelcd.co.uk/>) in developing online communities of practice related specifically to communicable disease. The benefits of developing communities of practice, with reference to knowledge capture and transfer, the importance of identifying and meeting user needs, and their role in promoting evidence-based practice are discussed. Finally a strategy for developing and sustaining community building is outlined.

## Categories and Subject Descriptors

### General Terms

Human Factors, Standardization, Verification, Reliability, Economics, Management.

### Keywords

Communicable disease, Communities of practice, Stakeholders, Healthcare Professionals, User information needs, online communities, digital library.

## 1. INTRODUCTION

The NeLCD (<http://www.nelcd.co.uk/>) is a real world healthcare project. It is one of the Specialist Libraries (SL) of the NeLH (National electronic Library for Health). Health information currently exists in vast amounts online but it is dispersed across many organizations and agencies. The NeLCD is a digital library, which aims to bring together the best available on-line, evidence-based, quality-tagged resources on the investigation, treatment, prevention and control of communicable disease making it easily accessible from a single portal.

The NeLCD are relying on the experts in communicable disease to provide and quality-assure the key information and documentation. By engaging healthcare professionals in this activity it is hoped that a community of users will be created and sustained. This is one of the primary aims of the NeLH, cited in Information for Health.<sup>1</sup> Recent literature has suggested that building online communities of practice will ensure knowledge is captured and transferred to those who need it enabling them to practice evidence-based medicine.<sup>2</sup>

## 2. BACKGROUND

Communities of practice as a term originates from the work on "situated learning" by Lave and Wenger<sup>3</sup> in which they discuss how people learn within an organizational situation (social learning) and how practice does in fact evolve. Further Wenger<sup>4</sup> suggests that communities of practice are an integral part of our daily lives and that they are informal. These attributes lend themselves well to the virtual environment, which is accessible 24/7 and is used both formally and informally.

The definition that best fits the communicable disease community of practice is that described by Stewart<sup>5</sup> who states that a community of practice is a group that emerges around a

discipline, defined by the subject that engages them, not by project, rank, department or even corporate affiliation.

There are a number of commercial and non-profit portals operating on the Internet supporting online communities (for example, Yahoo GeoCities<sup>6</sup>), however, in order to meet the needs and expectations of the targeted user group, the potential members need to be identified and be actively involved in the community creations and operation. The functionality depends, among others, on the binding specialty and the involvement of the members is the key to a long-term sustainability of the online community.

The role of the NeLCD is to provide a virtual environment in which those with an interest in communicable disease can meet and discuss topics of interest, share expertise and promote evidence-based practice. It provides a forum for discussion via egroups and engages the experts in gathering and critically appraising key literature as this has been identified as the key value-added feature distinguishing the NeLCD from other medical portals<sup>7</sup>. It is a tool enabling the dissemination of information to a wider community than was previously possible.

The community of practice that the NeLCD is nurturing includes all of those with an interest in communicable disease. It is able to do this because all of the information and documentation provided is in the public domain and is easily assessable to anyone with access to the Internet. However, it is most likely to include those who have a professional interest in communicable disease. This would include experts, professionals and novices from a variety of healthcare professions including Consultants in Communicable Disease Control, Consultants in Public Health Medicine, Environmental Health Officers, General Practitioners, Nurses, Microbiologists, and Scientists.

In this group the information needs will vary greatly. For some the need for information about communicable disease may be an intrinsic part of their work, while for others it may only be a small part. Identifying user information needs will be an ongoing body of work that will need to be assessed and reassessed at regular intervals to ensure that the needs of the community using the NeLCD are met. An MSc project<sup>8</sup> identifying the communicable disease information needs of Environmental Health Officers has already been carried out as a pilot and similar methodology using questionnaires sent and returned electronically will be employed to assess the information needs of other health care professionals to ensure that the information needs of the spectrum of users are met. However this study showed that semi-structured interviews were also useful in gathering background information and to inform questionnaire design.

An MSc project<sup>7</sup> including a questionnaire based survey of key professional societies related to communicable disease was conducted to ensure that the NeLCD meets the user requirements, provides the best available evidence and is aware of existing material. It is presumed that these professionals are scanning the literature and making judgements on quality of information as part of their everyday work. Enabling them to share this information via the NeLCD facilitates knowledge capture and transfer.

### 3. METHODS

#### 3.1 Identifying the community of practice

The expert societies and committees aligned to communicable disease were identified as part of an MSc project<sup>7</sup>. A

questionnaire survey of their information needs was carried out and the technique of snowballing was used to identify others with an interest in communicable disease.

#### 3.2 Engaging the community of practice

Face-to-face meetings with society representatives and presentations at committee meetings and conferences have been a large part of the methodology for promoting the NeLCD. Representatives were encouraged to return to their organizations and promoted the development of the NeLCD. Journal clubs as well as individuals have been engaged in assessing the quality of information provided by the NeLCD. It did not seem appropriate to dictate to organizations how they should proceed or organize themselves however guidance on how to produce a reviewer's assessment was given on the website (<http://www.nelcd.co.uk/>).

### 4. RESULTS

Results from the questionnaire survey<sup>7</sup> indicated an obvious need for the development of the NeLCD, with the majority of societies keen to become involved at advisory board level and many also willing to provide editorial assistance. In addition an individual in each society was identified as a link person who could promote the NeLCD. This research also highlighted the type of information that key societies suggested should be made available to the NeLCD.

Some 23 societies and professional bodies now support the development of the NeLCD. These are listed on the website.

### 5. DISCUSSION

Much enthusiasm for the NeLCD has been expressed but translating this into practice is proving more difficult as it involves quite significant culture change. There are many barriers to the development which will need to be tackled if the project is to be successful these include technical barriers, organization and cultural barriers.

The strategy for developing and sustaining this community of practice will include ongoing communication and collaboration with individuals (champions) and organizations. We are convinced that this will prove fruitful. Once the NeLCD becomes established and is seen as a useful source of information the community will also become established.

Continued support from the stakeholders, those with a vested interest in the project providing financial support and expert advice, will also ensure its success.

### 6. CONCLUSION

Communities of practice have always been a key vehicle for professional interaction, communication among colleagues and a key source for professional information seeking and dissemination. Recently, the Internet enabled communities to become virtual and connect people in a different more powerful way.

In particular, this is the case among healthcare professionals around communicable disease in the UK where the NeLCD digital library is playing the central role.

In this paper, we have defined communities of practice, discussed the new options that have arisen with the availability of virtual online communities and described the process of creating a sustainable community of communicable disease professionals in the UK around the NeLCD digital library. Although this is an ongoing project in its early stages, preliminary results were briefly discussed.

## 7. ACKNOWLEDGMENTS

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