

Simple Machines Forum, a Solution for Dialogue Optimization between Physicians

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Abstract

We developed an instrument which can ensure a quick and easy dialogue between the physicians of the Oncology Institute and family physicians. The platform we chose was Simple Machines Forum (abbreviated as SMF), a free Internet forum (BBS - Bulletin Board System) application. The purpose of this article is not to detail the software platform, but to emphasize the facilities and advantages of using this solution in the medical community.

Keywords: Bulletin Board System; Internet forum; Medical community.

Introduction

The idea of the project below appeared after a discussion between the physicians of the Oncology Institute "Ion Chiricuță" Cluj-Napoca (IOCN) and the members of the Medical Informatics and Biostatistics department of the University of Medicine and Pharmacy "Iuliu Hațieganu" Cluj-Napoca. The conclusion of the discussion was the necessity of an instrument which can ensure a quick and easy dialogue between the physicians of the Institute and family physicians. A solution for this dialogue could have been the well-known e-mail, but we wanted a dedicated and personalized instrument, with a high degree of security as to the confidentiality of medical data. From these reasons, the solution was to have a discussions forum, which we configured according to the needs of physicians in the Oncology Institute.

The idea of using the instrument "discussions forum" in the medical community is not a new idea. There are several implementations of this kind: „Medical Forum – The medical online community” [1], „Better Medicine for Healthgrades” [2], „Medipedia” [3] and other examples. Regardless of these implementations for a large community, any internet user is able to access the content and to comment on different subjects, the IOCN [4] forum is addressed to a closed community, the members of the IOCN and their collaborators, family physicians. The access of the last category is permitted after a filed request, verified and approved by the IOCN manager. The strict access of participants on the IOCN forum allows maintaining a high professional level of discussions, and guarantees the confidentiality of medical information.

Material and Method

The platform we chose was Simple Machines Forum (abbreviated as SMF) [5], a free Internet

forum (BBS - Bulletin Board System) application.

The purpose of this article is not to detail the software platform, but to emphasize the facilities and advantages of using this solution in the medical community. Although we don't want to detail, a short presentation of the history of this platform and of technical data is necessary.

Simple Machines started as a project under Lewis Media, LLC. In 2007, the Simple Machines Forum project was split off and formed its own company, organized as Simple Machines, LLC. In June of 2010, Simple Machines reformed as a not-for-profit organization (NPO) registered in Nevada. The people behind SMF are a diverse group of individuals who, in their free time, help make SMF what it is today, and help SMF take strides into the future. Many different skills are expressed within several teams, including customization, development, documentation, internationalization, support, project support, and marketing. Each team works together to help SMF grow and reach its full potential.

Simple Machines software is not only free but also Open Source. This means that anyone is free to modify and improve the source code as they see fit. And they may redistribute their modified code, as long as they follow these three guidelines [6]:

1. Retain the entire Simple Machines copyright and licensing notice in every file.
2. Make clear that the changed product is not the same as the original Simple Machines software (SMF or any other product).
3. Do not use the Simple Machines name (or the names of any Simple Machines contributors) to endorse or promote the modified software.

Open Source Software is used nowadays in a wide area of medical or medical informatics fields such as medical management [7], public health data collection [8], medical education [9], [10], medical records [11], images analysis [12] and more.

SMF is written in the popular language PHP and uses a MySQL database. It is designed to provide you with all the features you need from a bulletin board while having an absolute minimal impact on the resources of the server. The requirements for server are: programming language PHP 4 or PHP 5, web servers Apache 1.3, Apache 2.0-2.2, Microsoft IIS, Lighttpd or Nginx, operating systems GNU-Linux, BSD Unix, Microsoft Windows or Apple Mac OS. As for the browser and client requirements, these are: compatible browsers Mozilla Firefox, Google Chrome, Apple Safari, Mozilla, Internet Explorer, Opera or Konqueror, required Plugins/technologies HTML, Javascript, AJAX, CSS. There are over 40 languages supported by Simple Machines Forum including Romanian. Another important facility is that Simple Machine Forum can be used on mobile devices such as Android devices, iPhone, BlackBerry, Windows Phone 7, Symbian Phones (Nokia), HP WebOS.

Results

The main facilities of IOCN forum are:

- The interface is simple, intuitive, translated entirely into Romanian. The main page of the forum is presented in Figure 1.
- The access is secure and individualized for each user; the data needed to access the forum is completed by the users on a demand, verified and approved by the IOCN management. The requests to register can be filed online. The images below present the secure access on the IOCN forum, and the registration form.

As to the functioning of the forum, there are two distinct levels:

- On one hand, there are common discussions, on different themes, moderated by a physician from IOCN. The themes can be proposed by the IOCN team, or by any member of the forum who can initiate a new discussion subject.
- On the other hand, there is the possibility to exchange private messages between users, mostly confidential discussion between the family doctor and the IOCN physician. This is the way the confidential information can be sent.

The screenshot shows the homepage of a forum titled "Institutul Oncologic Cluj-Napoca în colaborare cu medicii de familie". The header features the IOCN logo, the BT logo, and the Banca Transilvania logo. A banner at the top right contains the text "DIVIZIA PENTRU MEDICI" and "Banca oamenilor înțelepuinători". The main content area includes a "Salut admin" message, a search bar, and a "Stiri" section with a link to a Google spreadsheet. Below this are three tabs: "Subiecte generale", "Psiho-oncologie", and "Programul de screening pentru cancerul de col uterin". Each tab displays a list of topics with their respective post counts and last messages.

Subiecte generale	Mesaje Necitite
Mesaj de întâmpinare Bine ați venit pe forumul „Institutul Oncologic Cluj-Napoca în colaborare cu medicii de familie”. Scopul acestui forum este de a îmbunătăți comunicarea cu medicii de familie în vederea eficiențizării actului medical, în ceea ce privește patologia oncologică.	0 Mesaje posteate 0 Subiecte
Regulament de funcționare Moderator: Lăncrăjan Ionuț (Chirurgie ginecologică IOCN)	1 Mesaje posteate 1 Subiecte
Congrese și manifestări științifice Sectiune dedicată publicării anunțurilor privitoare la congrese și diverse alte manifestări științifice Moderatori: Lăncrăjan Ionuț (Chirurgie ginecologică IOCN), # Singiorzan Laura (administrare)	4 Mesaje posteate 2 Subiecte
Discuții de interes general Sectiune de discuții libere. Moderator: # Singiorzan Laura (administrare)	2 Mesaje posteate 1 Subiecte

Psiho-oncologie	Mesaje Necitite
Considerații generale Informații cu privire la reacții, probleme psihico-emocionale ale pacienților oncologici și intervenții validate pentru rezolvarea acestora	1 Mesaje posteate 1 Subiecte

Programul de screening pentru cancerul de col uterin	Mesaje Necitite
Informații necesare contractării rețelei de screening	1 Mesaje posteate 1 Subiecte

Figure 1. The main page of the forum “IOCN in collaboration with family physicians”

The screenshot shows the login page of the forum. It features the same header and logo as the main page. The main area contains a "Bine ai venit, Vizitator. Te rugăm să te autentificori să te înregistrezi." message and a login form with fields for username, password, and session duration. A "Autentificare" button is present, along with a link for forgotten passwords. The footer includes standard forum navigation links and a copyright notice.

Figure 2. The Log in page of the forum “IOCN in collaboration with family physicians”

FORMULAR DE ÎNSCRIERE

Formular de inscriere ca membru al forumului de discutii Institutul Oncologic Cluj-Napoca in colaborare cu medicii de familie

*Obligatoriu

Nume utilizator solicitat *

OBLIGATORIU sub forma nume + prenume. De exemplu "alingiurgean"

Parola solicitata *

pot fi litere, cifre, fără spații

Adresa de email personală *

ex: aaa@umfcluj.ro

Nume *

Prenume *

Locul de munca *

Specialitatea *

ex: medic de familie, medic specialist oncolog etc

Numar de telefon *

Figure 3. The registration form of the forum “IOCN in collaboration with family physicians”

The means of sending private messages between forum members is similar to the well-known electronic e-mail, the difference is that the messages can be sent only to members of the forum. There is the possibility to attach files to the message: photos, videos, analysis results, etc. All these messages are kept in the archive, so they can be accessed at any time.

Another important facility is the search engine, the search could be realised after key words in the titles of discussion subjects, in the body of messages or in the list of users name.

In order to find and identify the members of the IOCN forum community, the list of members allows the search of users, of contact details or statistics as to their activity on the forum.

Figure 4. The windows of with private messages of the forum “IOCN in collaboration with family physicians”

Figure 5. The search engine of the forum “IOCN in collaboration with family physicians”

The screenshot shows the homepage of the "Institutul Oncologic Cluj-Napoca în colaborare cu medicii de familie" forum. At the top, there are logos for IOCN (Institut Oncologic "Prof. Dr. Ion Chirică" Cluj-Napoca), BT (Banca Transilvania), and DIVIZIA PENTRU MEDICI. A banner on the left says "Comunicare pentru eficiență". The main menu includes "Salut admin", "Afisează mesajele necite postate după ultima vizită.", "Afisează răspunsurile noi la mesajele tale postate.", and "Noiembrie 10, 2012, 02:39:16 p.m.". On the right, there is a search bar and a link to a Google form for registration. Below the header, a navigation bar includes "Pagina de Start", "Ajutor", "Căutare", "Administrare", "Moderare", "Profil", "Mesajele Mele", "Membri", and "Ieșire". A message at the top says "Sunt afișați membrii de la 1 până la 30 (din totalul de 79 membri)". The main content area is titled "Lista de membri" and shows a table of members with columns for Status, Username, Email, Website, ICQ, AIM, YIM, MSN, Rank, Date of Registration, and Posts. The table lists 30 members, mostly from June 2012.

Statut	Nume de utilizator	Adresa de email	Website	ICQ	AIM	YIM	MSN	Rang	Data Înregistrării	Mesaje poste
<input type="checkbox"/>	# Pop Florina (Psiholog IOCN)	✉						Newbie	2012-06-08	1
<input type="checkbox"/>	# Singiorzan Laura (administrare)	✉						Global Moderator	2012-04-23	5
<input checked="" type="checkbox"/>	admin	✉						Administrator	2012-03-15	4
<input type="checkbox"/>	Andronic Adriana (Holbab/BV)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Badulescu Claudiu (IOCN rezident chirurg)	✉						Newbie	2012-06-13	0
<input type="checkbox"/>	Balogh Magdalena (Ciumești/SM)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Bărbus Dana Mihaela (Baia Mare/MM)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Besenyodi Noemi (Satu Mare/SM)	✉						Newbie	2012-06-11	0
<input type="checkbox"/>	Blatniu Carmenita (Satu-Mare/SM)	✉						Newbie	2012-06-16	0
<input type="checkbox"/>	Biliboacă Cristina (Făgăraș/BV)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Bocai Daciana (Vișeu de Sus/MM)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Botca Corina (Râu de Mori/HD)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Butanu Claudia (Florești/CJ)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Butnaru Anton (Cugir/AB)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Câmpeanu Emil (Petroșani/HD)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Chiș-Petrile Angela (Dobrin/SI)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Ciornei Aurora (Dragu/SI)	✉						Newbie	2012-06-06	0
<input type="checkbox"/>	Cojocaru Ilie (Năsăud/BN)	✉						Newbie	2012-06-06	0

Figure 6. The of members of the forum “IOCN in collaboration with family physicians”

Discussions

The IOCN forum was launched and presented at the Regional Conference of Family Physicians 24-26 May 2012 in Cluj-Napoca, when the greatest part of the forum members registered on the forum. Now the forum has 80 users, mostly from Cluj, Hunedoara, Alba Iulia, Maramureş, Braşov, Satu Mare, Bistriţa Năsăud, Sălaj. In this context there were established two levels of forum functioning: the private communication between physicians, and the possibility to make announcements regarding conferences, scientific events, announcements for forum members.

At this conference the main interest areas were established, which are now implemented or are to be developed – the themes, discussions subjects in the forum. Now, the structure of the forum is the following:

General subjects: Welcome message, Functioning Regulations, Conferences and Scientific Manifestations, General Discussions.

Psyco-oncology with the following topics: General considerations.

The screening program for cervical cancer with the following topics: General aspects about the contract of screening network, the Order 537/2012, The IIIrd Consensus Regional Conference.

The content of the forum is developing, and there are several areas that need to be added. Based on users suggestions the topics that will be added are:

Surgical interventions:

How to prepare the patient for surgical intervention?

The recovery after surgery.

Radiotherapy/ Chemotherapy:

How to prepare the patient for radiotherapy/ chemotherapy?,

How to explain the side effects of therapy?,

The insertion of the patient into the society after radiotherapy/chemotherapy.

Conclusions

A tool like the forum we presented is a structure in continuous changing and development. Even if our forum has already a large number of users for the proposed aim, his life is yet at the beginning and his future development depends only on the members of the new formed community interests to change it in an useful and powerful tool.

Conflict of Interest

The authors declare that they have no conflict of interest.

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