

# Cancer on the Internet 3rd International Conference

ESO, 9-10 July, 2006 Washington - USA

within the UICC World Cancer Congress



Azalea, the digital library for cancer patients, their relatives and citizens www.azaleaweb.it

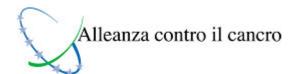






Effectiveness as a result of www.interaction between virtual and physical resources





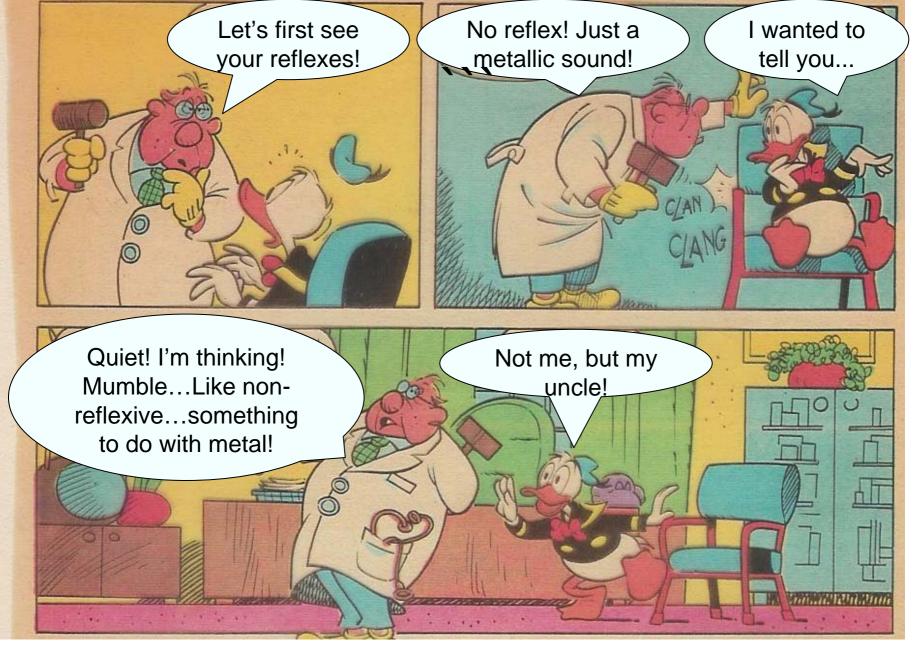


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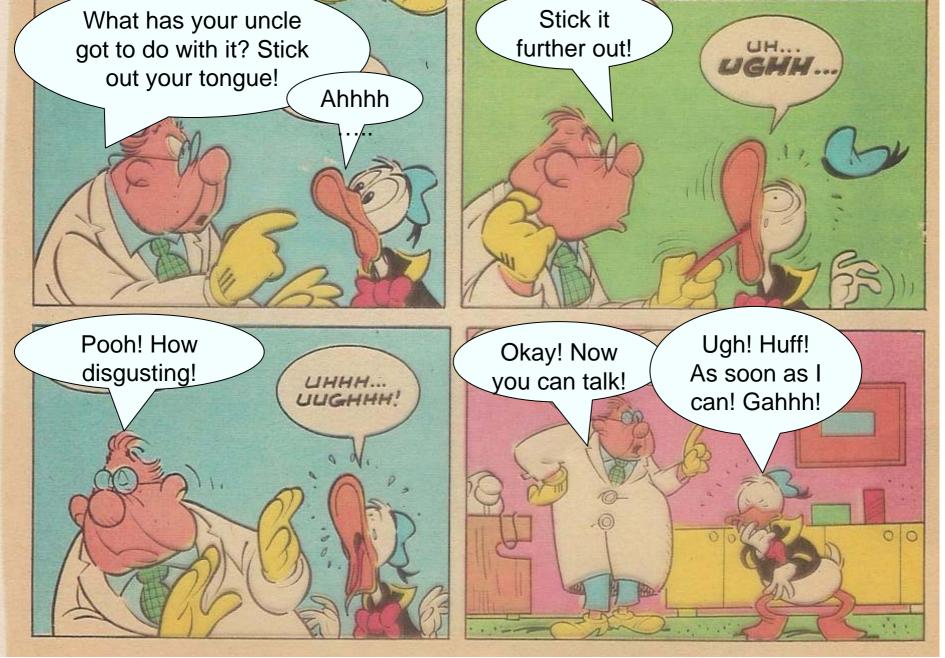
# Synopsis

- Information as communication: before and after Internet
- Problems of effectiveness in online health care information
- Azalea's answer to problems of information and communication
- Beyond Internet: the SICOP project





THE LACK OF COMMUNICATION IN AN EVERYDAY SITUATION...



#### THE LACK OF COMMUNICATION IN AN EVERYDAY SITUATION...

# Health care on the Internet: from the lack of communication to an excess of information

#### Biomedical information sites: more than 15.000

**Source:** <a href="http://us.deloitte.com/us/news/99april/eastudy.htm">http://us.deloitte.com/us/news/99april/eastudy.htm</a>

- Access to such sites: 37% of the total web access (43% in USA)
- Users researching health care information on-line: almost 100 million, of which nearly 50% are from the general public, in 90% of the cases, the person is searching information regarding their disease or that of a member of their family.
- Only 58% of Italians are able to find useful information in their language compared to 96% of Anglophones, 79% French and 89%Polish people < www.hon.CH >
- Other statistics: North Europe, Greece, Spain, Portugal 15% Italy 24% (Eurobarometer Data 2003 cited by Sole 24 ore, 122:18, May 5 2003)
- "Europeans constitute the most numerous group using the Internet with 191 million, followed by people from Asia (187 million), North America (183 million), Latin America (33 million), Africa (6 million), and the Middle East (5 million)"

http://www.nua.ie/surveys/how\_many\_online/. 2003.



# "The web as a worldwide health consultant"

#### More recent data:

- There are approximately 20 million Internet users In Italy among those over 18-years old (42% - of the majority age population)
- 26% of the information searched for concerns health, i.e.
- 5 million Italians conduct health-related Web searches

Source: "The web as a worldwide health consultant", CENSIS (Centre for Social Studies and Policies) survey, July 2005) <a href="http://www.censis.it/">http://www.censis.it/</a>



# Effectiveness

#### Effectiveness =

Information

+

Communication

+

 Personalization (customization)

- Information must be effective in order to be communicative
- It is necessary to 'demass' communication for it to be efficacious (Chamberlain 1994)
- How to combine personalization
- with electronic systems operating in a
- stereotypical manner on the Internet?

# Factors that reduce the effectiveness of online information (1)

## Internet is anarchic

Information needs to be organized using metadata and international standards

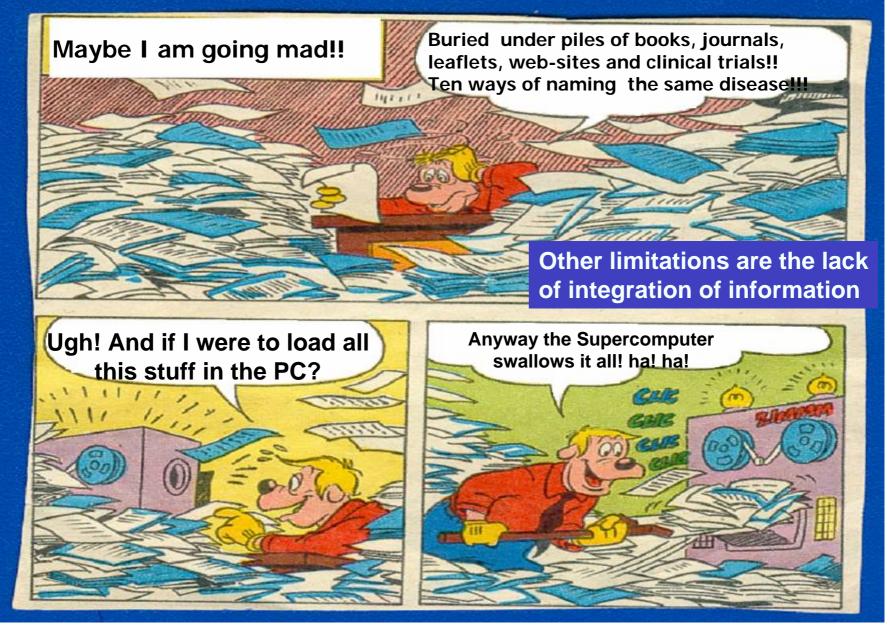
- Search engines contain a great deal of useless information
- There is some risks of not finding necessary information
- Useful information is often found by chance, and in many cases it is not helpful to the patient



# Factors that reduce the effectiveness of online information (2)

- Structured databases offer "easy to search" information but often require one to rephrase a question to obtain the necessary information
- Information needs to be made accessible in an integrated manner (Dublin Core)
- It is necessary to consult other sources to obtain full information (guidelines archives, clinical protocols, papers, journals and books)





# THE INTERNET IS ANARCHIC: IT DOES NOT GUARANTEE THE EFFICIENT RETRIEVAL OF INFORMATION

# And in Italy some years ago?

- Before Azalea was launched, information for patients in Italy was not collated but rather scattered across virtual and physical sites, journals, pamphlets etc.
- This led to problems of access
- Patients were not in a position to validate the retrieved information
- Duplication of procedures existed as the number of papers regarding any disease, e.g. breast cancer, was unknown



# Negative Effectiveness: lack of quality evaluation of the information

Invalid health information is potentially lethal

I Chalmers BMJ, April 21, 2001; 322(7292):998b-998



# Lack of effectiveness

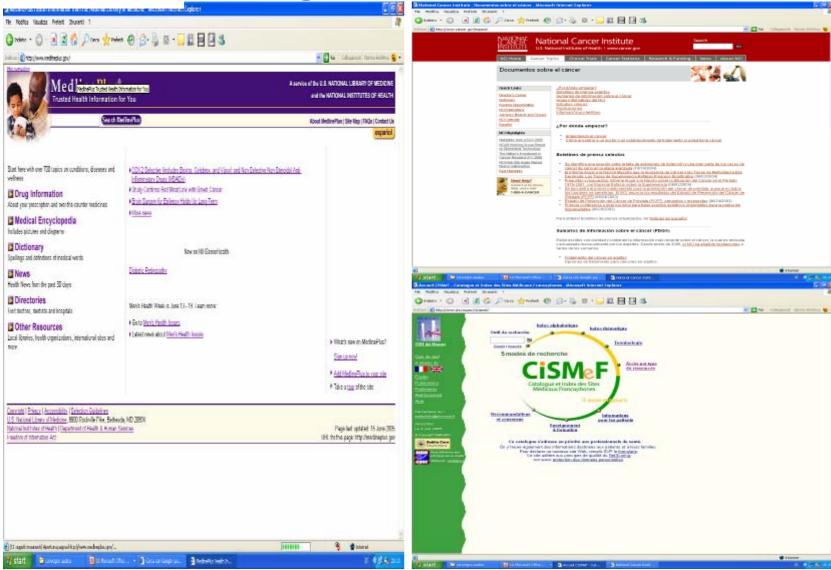
Linguistic barriers
 make it difficult to use
 quality information
 produced in
 unfamiliar languages

Only 58% of Italians are able to find useful information in their own language compared to 96% of Anglophones, 79% French and 89% of Polish people (www.hon.CH)





Linguistic Barrier



Patients are not "empty buckets into which bits of data, treated like bricks, can be tossed" (*L. Bunyan*)







# Last but not least Internet divide

 Large swathes of population do not have access to the Internet or are unable to obtain online information from the Web.

(in Europe 60-65% do not use the computer/Eurostat data 2006)

#### "inverse information law"

 "access to high quality relevant information is particularly difficult for those who would need it most ...people with low health literacy do not benefit from advance in consumer health informatics..."

G. Eysenbach JMIR 3(2):e19



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#### Azalea:

an Italian answer to the problems of "effectiveness"

The Azalea Digital Library for cancer patients and their families

#### OR

 Effectiveness as a result of interaction between virtual and physical/human resources



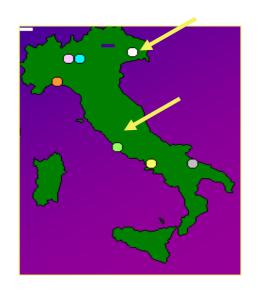
#### What is Azalea?



An Italian multicenter collaborative project financed by the Alliance Against Cancer

coordinated by

Centro di Riferimento Oncologico (CRO) Aviano and Regina Elena Institute (IRE), Rome



Alliance Against Cancer (Alleanza Contro il Cancro, ACC) is the Italian network of the Oncology Institutes for Research, Hospitalization and Health Care

Alleanza contro il cancro

Created for sharing projects, finances and human resources

# Behind Azalea: the international models (1)

## **CancerBacup**

<a href="http://www.cancerbacup.org.uk/Home">http://www.cancerbacup.org.uk/Home</a>

#### Cancer.gov

<a href="http://www.cancer.gov/cancer\_information/pdg/">http://www.cancer.gov/cancer\_information/pdg/</a>>

### **Medlineplus**

<a href="http://www.nlm.nih.gov/medlineplus/medlineplus.html">http://www.nlm.nih.gov/medlineplus/medlineplus.html</a>

## **Caphis**

<a href="http://caphis.mlanet.org/">http://caphis.mlanet.org/">

#### **CISMeF**

<http://www.cismef.rouen.fr>

#### Internet Quality Internet resources

<http://biome.ac.uk/>

## Behind Azalea: an Italian "real" experience (2)

Behind Azalea there is a non-virtual context:

✓ The Patients Library created at the Aviano National Cancer Institute, 1998, for meeting the information needs of Italian cancer patients in a tailored way

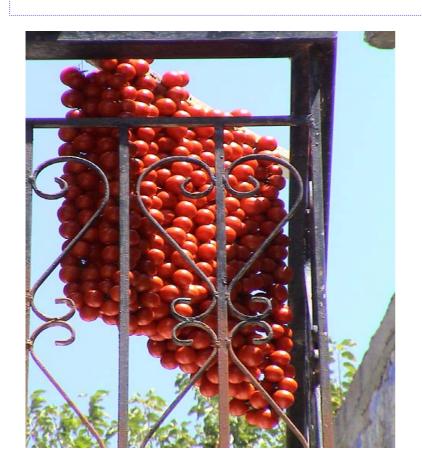


3. an assigned place.
Warranty of scientific level neutral

Warranty of scientific level, neutrality, accessibility, and confidentiality

http://www.cro.sanita.fvg.it/biblioteca/bibpaz/txt\_info\_bibpaz.htm

## "Mediterranean style" of communication



"Tailored way" means that the intermediary expert can answer the same question with a different package of materials according to the profile of a particular patient.

I. Truccolo et al. A pilot project of Cancer Patient Library in Italy: the results of a customer satisfaction survey and its products, *Health Info Libr J, 2006 in press* 



## Physical users versus online

#### So, at the patients library:

it is useful to hold many booklets about the same topic with different "nuances"

and Azalea is the repository to be used and implemented

➤ it is fundamental to listen carefully to the users' information requests ... ... this also improves the Azalea search interface



Our aim is
to transfer the
ability to deal with
physical patients to
the online users

# The Network of Azalea's libraries (3)



- ✓ At present
   there are about
   20 Patient
   Libraries/
   Information
   points in Italy
- ✓ Some peculiarities and many similarities...
- ✓ A survey is ongoing







# Behind Azalea: the physical and electronic archive of the CRO Library for Patients (4)



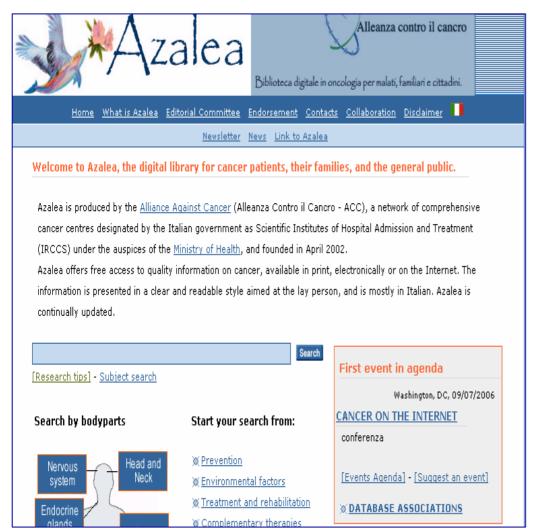


- ➤ Azalea's first nucleus: the "Oncologic Data Bank of Literature for patients and common people" (CRO, ©2003)
- ➤ about 900 records



Truccolo I et al . An Italian Oncology Data Bank for patients and common people. *EAHIL Newsletter 2002*, 2002 (61): 21-

#### So...What is Azalea?

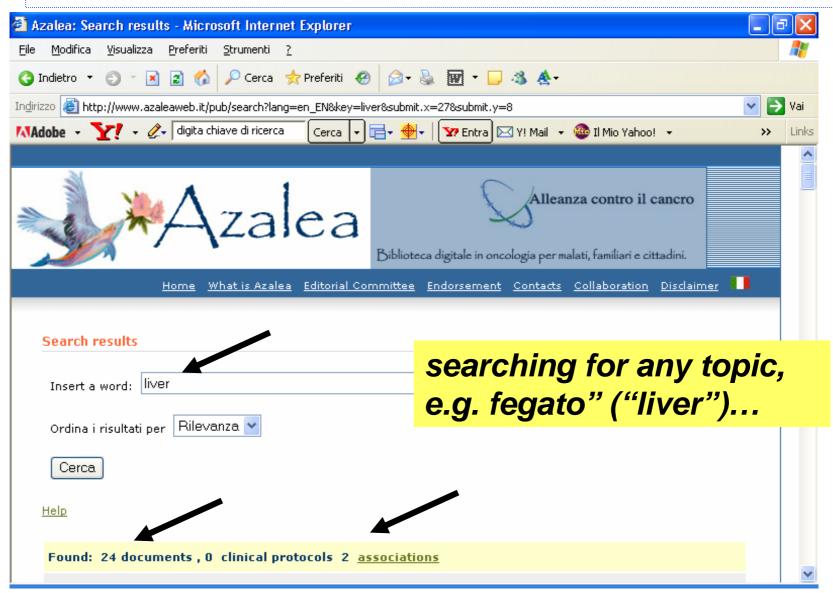


An integrated database offering material on cancer, aimed at patients, their families and the general public: more than 3300 records in total



Bogliolo et al. More information, more choice: an Italian database for oncology patients *Ann Oncol.*2005; 16: 1962-1967

### An integrated database means that...(cont'd)



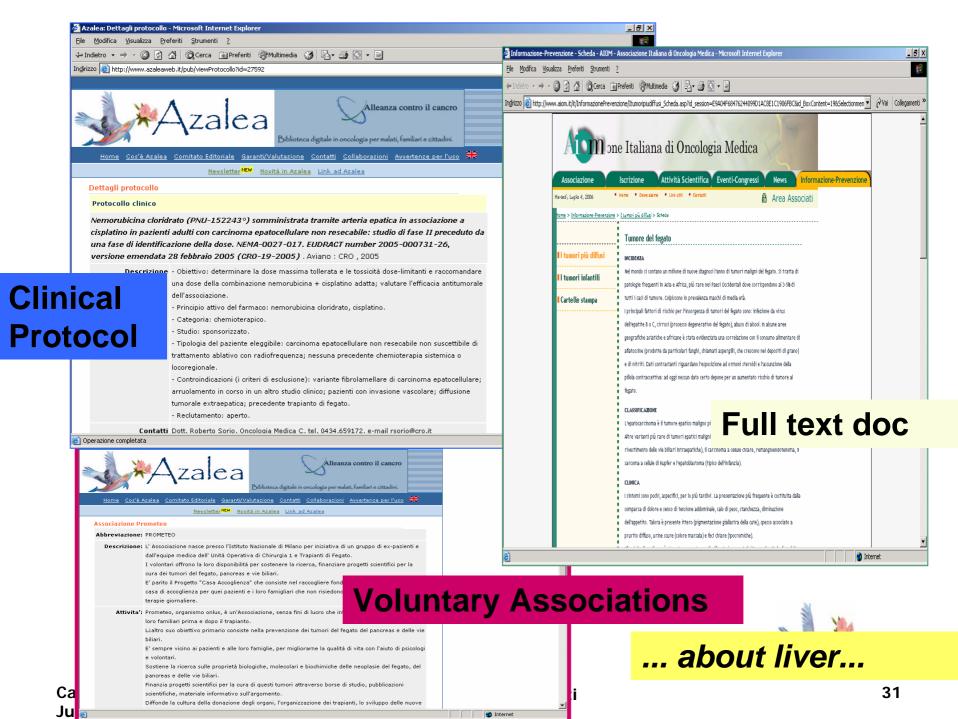


Rilevanza Ordina i risultati per Cerca Aiuto Trovati: 33 Documenti, O Protocolli clinici 3 Associazioni Documenti Pagina Web 1/33

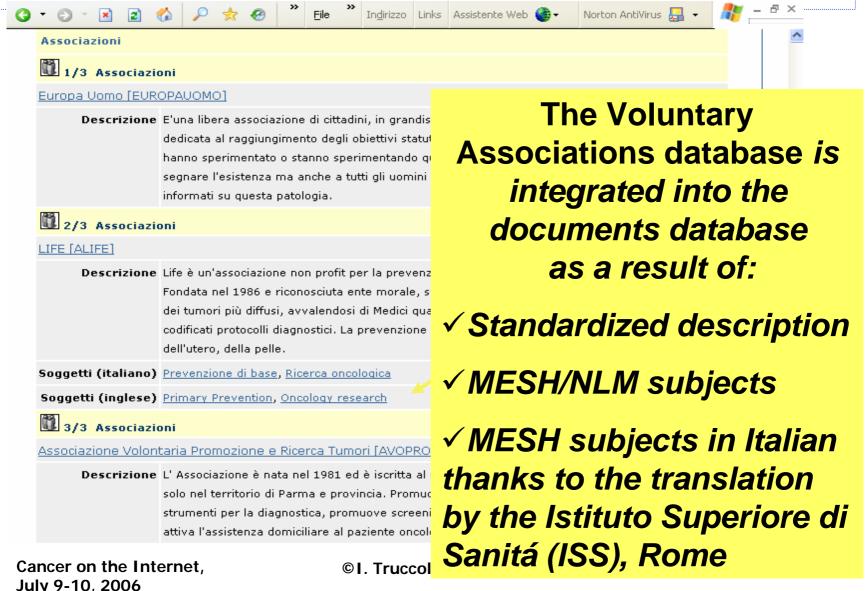
information not only about documents, but also clinical trials and associations or health care organizations working in that related field (in process)

Tumori della prostata / Urologia clinica .

Breve descrizione



# The Voluntary Associations database: not merely a list of descriptive records



#### The contact with the Associations



We keep in touch with the Associations...

In this way, those who produce cancer information for patients

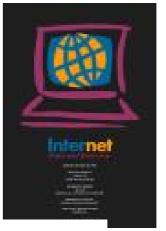
- ✓ can become better known to the public (see the Agenda)
- ✓ are easily contactable, irrespective of their Web presence or absence and regardless of their geographical location in Italy

## Azalea in figures, June 2006

- √ 1892 records pertaining to informational material
- √ 614 full text, 229
  websites, 89 clinical
  trials, 822 obtainable by
  request from holding
  library
- ✓ The materials available are: books, leaflets, articles, associations, web sites, clinical trials, dvds etc...



✓ Print or other kinds of support are available



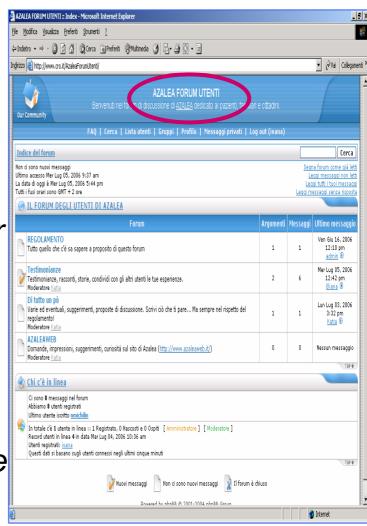


√The main language of the material is Italian



#### The Azalea Patient Forum

- ➤ 4 more Institutions collaborating beyond the 7 initial ones, plus other contacts
- ✓ More than 400 documents delivered on request by traditional and electronic mail (since October 2004)
- ✓ Total 19,000 different Internet visitors each month
- ✓ Analysis of usage statistics to improve the database and make it more suitable to user needs



#### An overview on the Azalea resources

New records alert

Search by subject

Results

Types of documents: print, electronic, websites, etc..



**English** interface

Clinical trials

Associations

Database

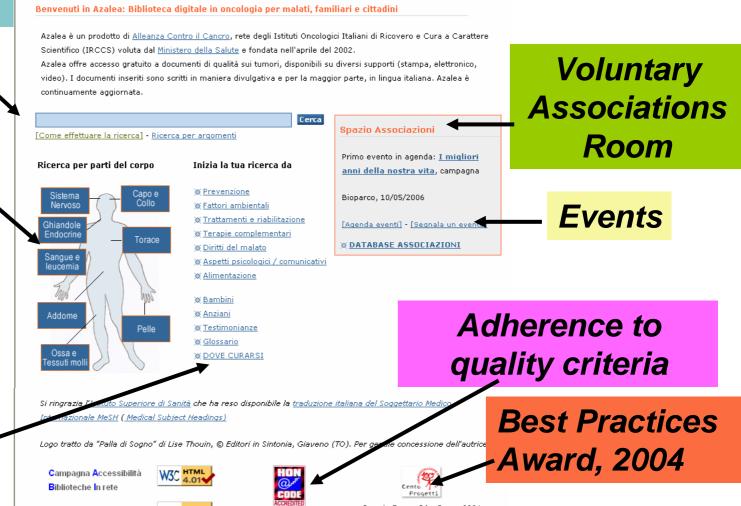
Document
Delivery
among
libraries

Cancer on the Internet, July 9-10, 2006 ©I. Truccolo;G. Cognetti

#### Search by text words

#### Search by body part

#### Search by Menu



Alleanza contro il cancro

**Quality Evaluation Committee** 

Adherence to accessibility

requirements

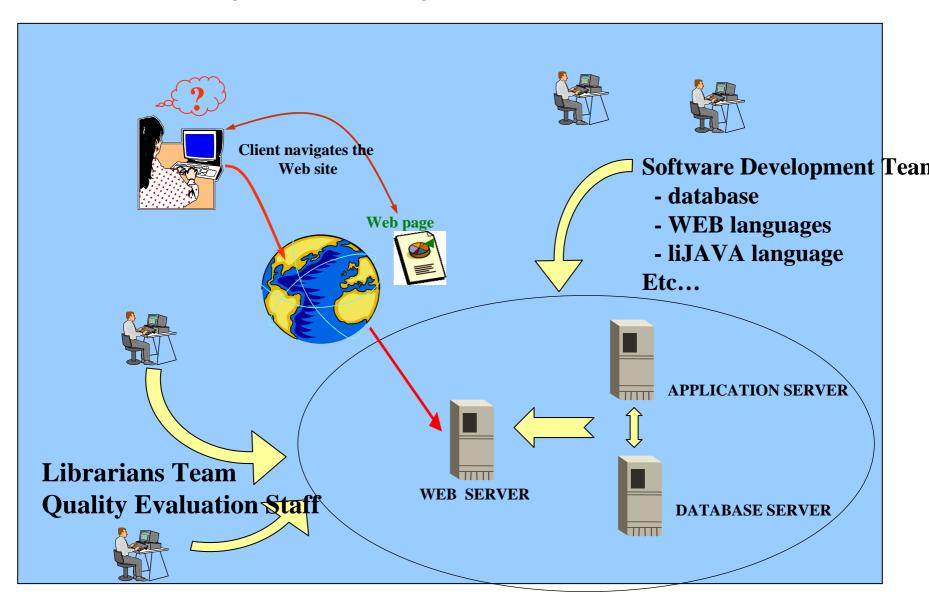
Cancer on the Interne Copyright © 2004, data creazione: 15/4/2004 - data ultimo ag July 9-10, 2006

Riferimento Oncologico - Aviano

zalea

Newsletter NEW Novità in Azalea Link ad Azalea

#### Despite its complex back office...



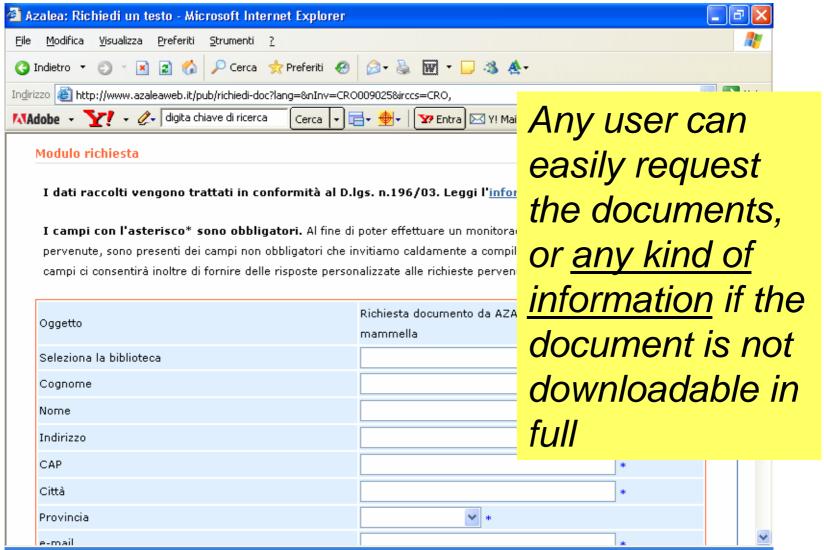
## Azaleaweb has a simple interface for facilitating information retrieval by those with little or no expertise ...



You can search by

- ✓ simply typing one or more commonly-used terms in the search box
- ✓ or choosing a subject from a list
- ✓ or clicking on a body part
- ✓ or writing the name of an Association...

### The patient can easily contact the Azalea Network Libraries



#### The Azalea way to support online information



Patients can obtain detailed, up to date and straightforward answers to their questions by:

- ✓ mail, telephone/fax OR
- ✓ coming to the nearest or preferred Library/ Information Pointof the Azalea Network OR
- ✓ coming to the nearest Association



#### The Quality Evaluation of the Material in Azalea: some hints

- ➤ The three aspects of the Quality Evaluation of the material
  - a) TECHNICAL-FORMAL ASPECTS
  - b) COMMUNICATIVE STYLE
  - b) CONTENT

#### Tools:

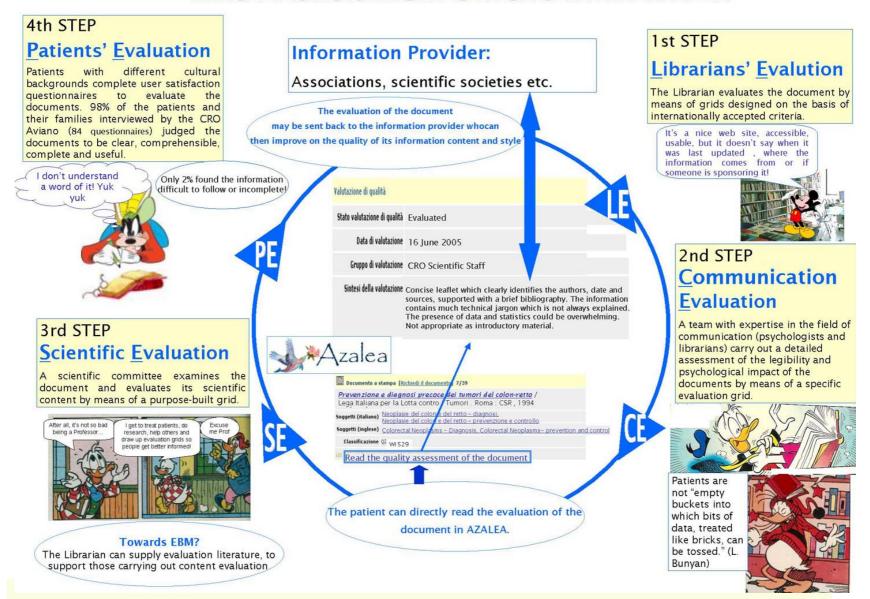
- ➤ A system of 3 evaluation grids for evaluating the 3 aspects
- ➤ The Materials Evaluation Committee
- ➤ Priority list criteria
- ➤ Patients opinion about quality



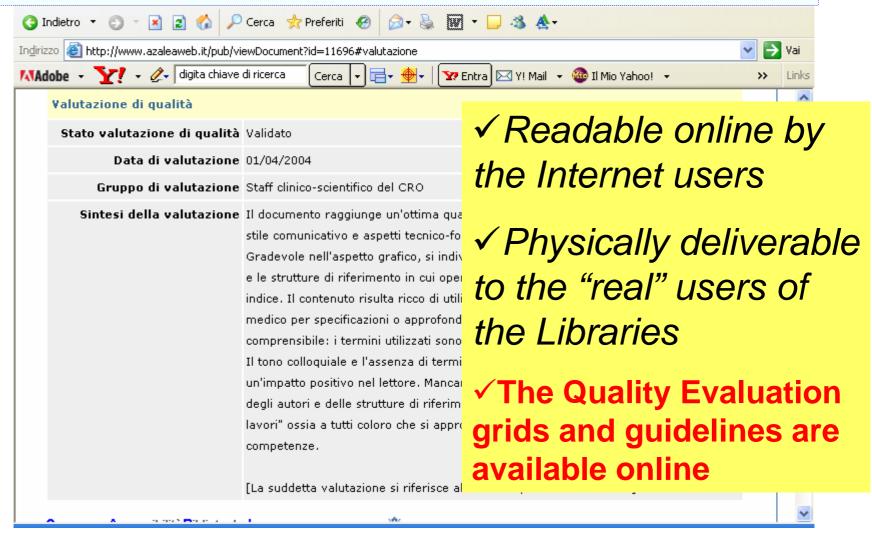




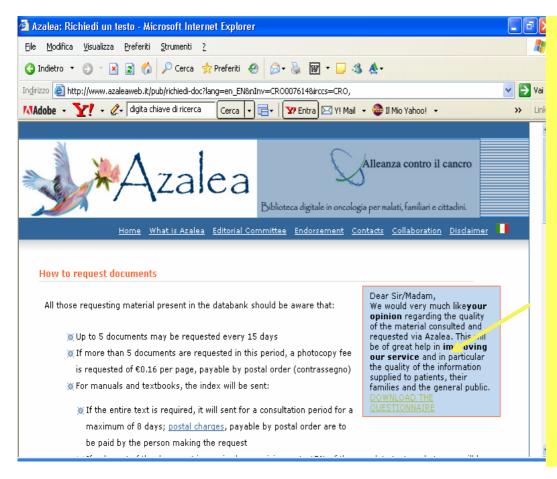
#### **The Evaluation Circle in AZALEA**



## The Result of the Quality process is a Quality Evaluation abstract



## Patients opinions regarding quality of the written and electronic material: a survey is ongoing



✓ Patients and citizens are asked their opinion concerning the quality of the material consulted and requested through Azalea

✓ An easy-to-answer questionnaire is downloadable

#### A hint: patients opinions concerning quality of specific documents indexed in Azalea

	Clear/Simple	Comprehensible	Complete	Useful
Very	63%	57%	20%	44%
Enough	27%	34%	46%	39%
Sufficient	9%	10%	28%	15%
Poor	0%	0%	4%	2%
Not at all	0%	0%	1%	0%

...in a sample of 113 people, users of the CRO LP, 2004

Bianchet, K, et al. AIDAinformazioni, 3, 2005 < www.aidainformazioni.it >

#### Last but not least: the SICOP Project

# Information System for Oncological Comunication with Patients

- Approved by the Italian Ministry of Health in 2006
- Coordinated by IRE, Rome



- Participants:
  - 6 Cancer Research Institutes,
  - 3 Associations for patients
- Aim:

to establish quality communication models for the supplying of information to patients

 Muldisciplinary equipes (librarians, psycologists, oncologists etc) are involved in the project

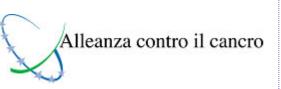
#### **Conclusion**



To quote Gertrude Stein, "A difference, to be a difference, must make a difference",

we believe that the Azalea information system can make a difference in the Internet world because of its formula:

- ➤ Digital library +
- Physical patient library +
- Voluntary Associations collaboration +
- ➤ Close Involvement of Healthcare Professionals in Evaluating Quality and Writing Materials for Patients



## The Azalea Project Research Group



- I. Truccolo<sup>1</sup>, G. Cognetti<sup>2</sup>, W. Russell-Edu<sup>3</sup>, A. Bogliolo<sup>4</sup>, A. Codonesu<sup>5</sup>, R. Ricci<sup>1</sup>, P. Seroppi<sup>1</sup>, K. Bianchet<sup>1</sup>, A. Trocino<sup>6</sup>, A.Florita<sup>5</sup>, P. De Cillis<sup>7</sup>, R. Montanaro<sup>7</sup>, A. Steffan<sup>1</sup>, F. Solero<sup>2</sup>, L. Cecere<sup>2</sup>, N. Michilin<sup>1</sup>, M. Montella<sup>6</sup>, F. Cognetti<sup>2</sup>, P. De Paoli\*\*<sup>1</sup>
  - Centro di Riferimento Oncologico (CRO), Aviano, Italy
     Regina Elena Institute (IRE), Rome, Italy
    - <sup>3</sup> European Institute of Oncology (IEO), Milan, Italy
  - <sup>4</sup> National Cancer Research Institute (IST), Genoa, Italy
    - <sup>5</sup> National Cancer Institute (INT), Milan, Italy
    - <sup>6</sup> National Cancer Institute Pascale, Naples, Italy
      - <sup>7</sup> National Cancer Institute, Bari, Italy

(\*\*on behalf of all the CRO Aviano Staff involved in the Quality Evaluation of the Material)

### Thank you for your attention!

**Questions?** 

Gaetana Cognetti,

Regina Elena Institute Library

Rome, Tel/fax + 39 06 52665500



Ivana Truccolo.

Centro di Riferimento Oncologico Library

Aviano (PN). Tel +39 0434 659248/



