Informatics Team Notes

The following slides are the original lectures. Only notes were added and they're mostly additional information. 431 team notes are in purple color and this year's notes are in green color.

For any mistakes contact informatics team leader:
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CONSUMER HEALTH INFORMATICS (CHI)

empowered consumer + engaged in health care

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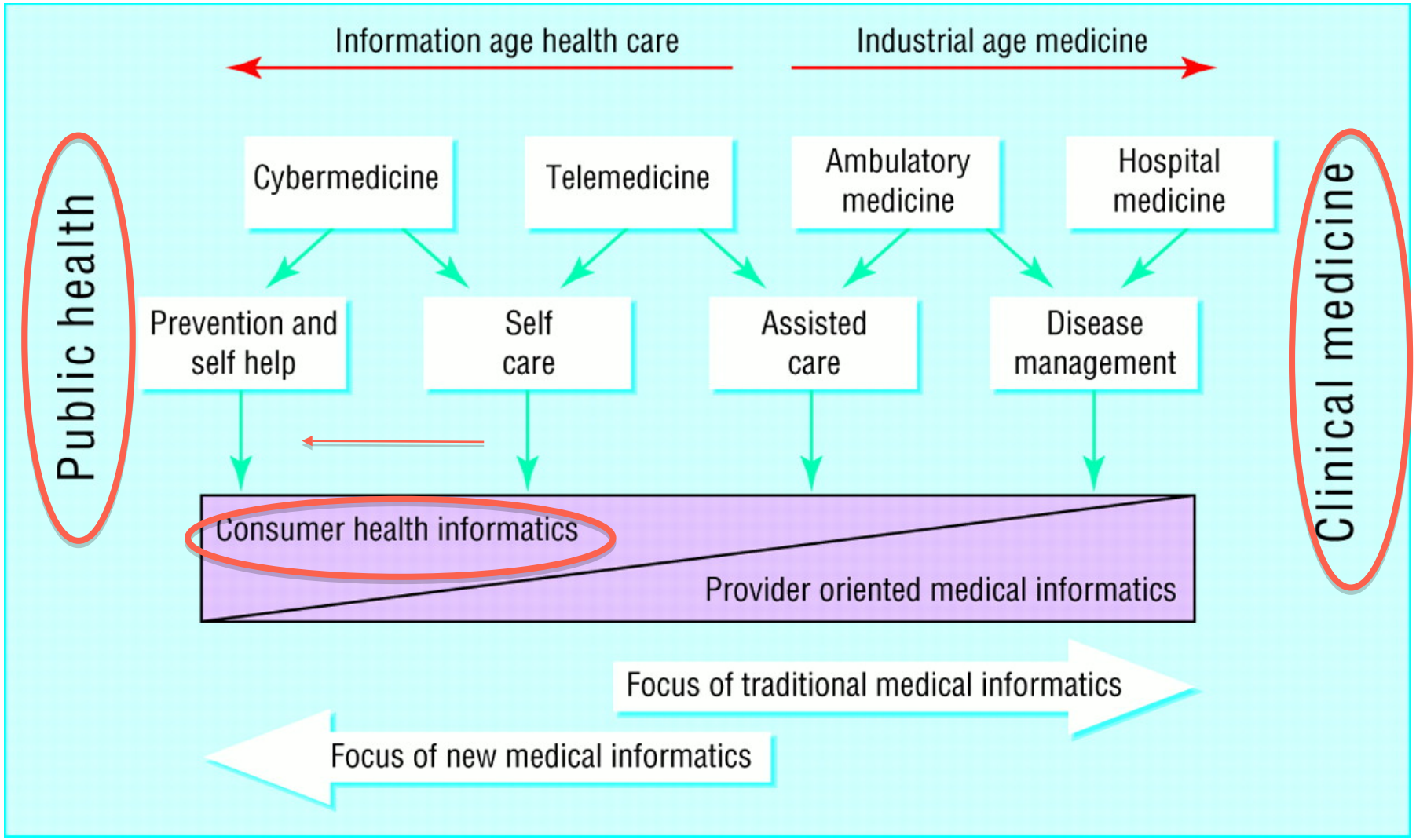
Notes were provided by: Dana Aldubaib

The focus of traditional medical informatics is shifting from health professionals to consumers

important to understand. Dr.said it's for higher levels but memories it just in case.



Consumer Health Informatics

- Branch of health informatics that:
  - ✓ Analyzes information needs of consumers
  - ✓ Studies and implements methods of making health information accessible to consumers
  - ✓ Integrates consumer preferences into health care information systems

Eysenbach, G. (2000). Consumer health informatics. *BMJ, 320,* 1713-1716

other defention of CHI

- ✓Integration of consumer health information and information technology in an environment of shared healthcare decision-making that supports effective self-health action.

- Good public hygiene: protection against public issues and consumer strength
- 3 dimension: knowledge + attitude + skills

Lewis, D. & Friedman, C. (2002). Consumer health informatics. In M.J. Ball, K.J. Hannah, S.K. Newbold, & J.V.Douglas (Eds.). *Nursing informatics: Where caring and technology meet (3rd ed.).* New York; Springer-Verlag.

Consumers?

Health Consumer; could be anyone

- All persons, sick or well, who seek information and take action in accord with personal preferences, life situations and individual health goals.
- Broader than “patient “ – includes the well and caregivers
- Very diverse group

Brennan&Safran.Chapter 2 Empowered consumers.
In: Lewis, Eysenbach, Kukafka, Stavri, Jimison. Consumer Health Informatics
Springer, 2005

Empowered Consumers

- Empowerment: Granting of power to a dependent group or enhancing an individual's ability for self determination
- “a social process of recognizing, promoting and enhancing people’ abilities to meet their own needs, to solve their own problems, and mobilize the necessary resources in order to feel in control of their lives” (Gibson, 1991)

goal: engage in health care process, take care of himself and others and control their health.

Brennan&Safran.Chapter 2 Empowered consumers.
In: Lewis, Eysenbach, Kukafka, Stavri, Jimison. Consumer Health Informatics
Springer, 2005

Empowered Consumers

first we should have credible information (true)

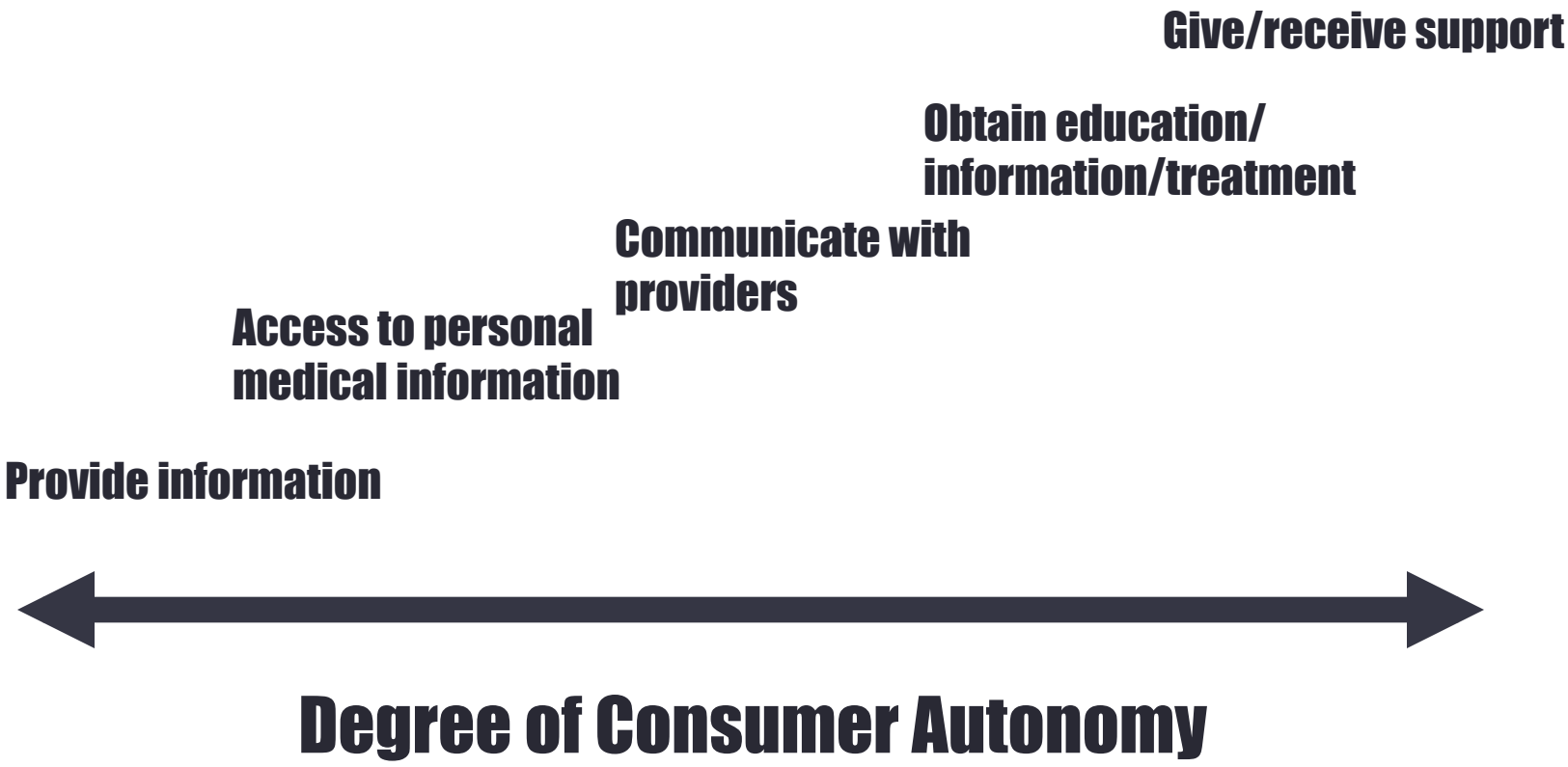
- Consumer Health Informatics applications support the ideology of empowered consumers (a power balance in the patient-health professional relationship) by: e.g
  - ✓Informing about health concerns to be positive and supportive with others can be anonymous if there are social barriers.
  - ✓Assisting in finding others with similar concerns
  - ✓Assisting in navigating the health care system skills of how to navigate and use personal health records
  - ✓Access to clinical records and personal care management tools. خدمات how to use it

Brennan&Safran.Chapter 2 Empowered consumers.
In: Lewis, Eysenbach, Kukafka, Stavri, Jimison. Consumer Health Informatics
Springer, 2005

History of CHI

- Consumer movement of 1970s
  - Increased demand for information
  - Greater participation in “medical” decision making
- Prominence of “self-help” phenomenon of 1980s
  - Huge increase in health information for lay audience
- Widespread use of the Internet
  - Increased dramatically throughout 1990s

CHI Continuum



What is Consumer Health Informatics

- Branch of health informatics that:
  - Analyzes information **needs** of consumers
  - Studies and implements methods of making health information accessible to consumers
  - **Integrates consumer preferences into health care information systems**

Eysenbach, G. (2000). Consumer health informatics. *BMJ, 320,* 1713-1716

Health Informatics NHS
HEALTH SPECTRUM
Is cyber medicine killing you?
So viel Information war nie
Sjuka blir sjukare när de hämtar kunskap på nätet
BBC NEWS
Fears over health 'cures' on the web
Warning on internet health advice
Patient, don't try to heal thyself
Logging on can make you sicker
Click To Get Sick?
News
Internet-based health information may be hazardous: study
Internet makes us sick
Web Not Always Safe Health Source for Some
Warning over bad health advice online
People who use their computers to find health information often wind up in worse condition than if they had listened to their doctor
CBC Health & Science News
Internet-based health information may be hazardous: study
Too much information bad for your health, study shows
Study: Internet Medical Advice Could Have Unintended Consequences

BMJ

UK GPs wanted for Clinical Research

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BMJ 1997;314:1875 (28 June)

Information in practice

Reliability of health information for the public on the world wide web: systematic survey of advice on managing fever in children at home

Piero Impicciatore, *research fellow*,[a] **Chiara Pandolfini**, *research fellow*,[a] **Nicola Casella**, *research fellow*,[a] **Maurizio Bonati**, *head* [a]

[a] Laboratory for Mother and Child Health Istituto di Ricerche Farmacologiche "Mario Negri", Via Eritrea 62, 20157 Milan, Italy

Correspondence to: Dr Bonati Mother_Child@farmnet.marionegri.it

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Empirical Studies Assessing the Quality of Health Information for Consumers on the World Wide Web

A Systematic Review

analysis of publication it self

Main issues with CHI online:

- Quality of web based information
- Credibility

Important Slide

Quality control of health information on the internet

- The quality control of health information on the internet rests on **four pillars**:
  - educating the consumer information
  - encouraging the self regulation of providers of health information to be a part of it
  - having third parties evaluate the information
  - enforcing consents in cases of dissemination of fraudulent or harmful information. by rules

Credibility Criteria

important (but dr. didn't explain it)

- The FA4CT Algorithm: A New Model and Tool for Consumers to Assess and Filter Health Information on the Internet
- **CREDIBLE Criterion**
- **C**urrent and frequently updated
- **R**eference cited
- **E**xplicit purpose
- **D**isclosure of sponsors
- **I**nterest disclosed and no conflicts found (e.g financial)
- **B**alanced
- **L**evel of **E**vidence

- Eysenbach G, Thomson M. The FA4CT Algorithm: A New Model and Tool for Consumers to Assess and Filter Health Information on the Internet. In: Kuhn K (ed.) Medinfo 2007 Proceedings (in press)

Where clinical IS and Consumer health informatics meet

- Patient Portals: Patient interface to clinical information systems

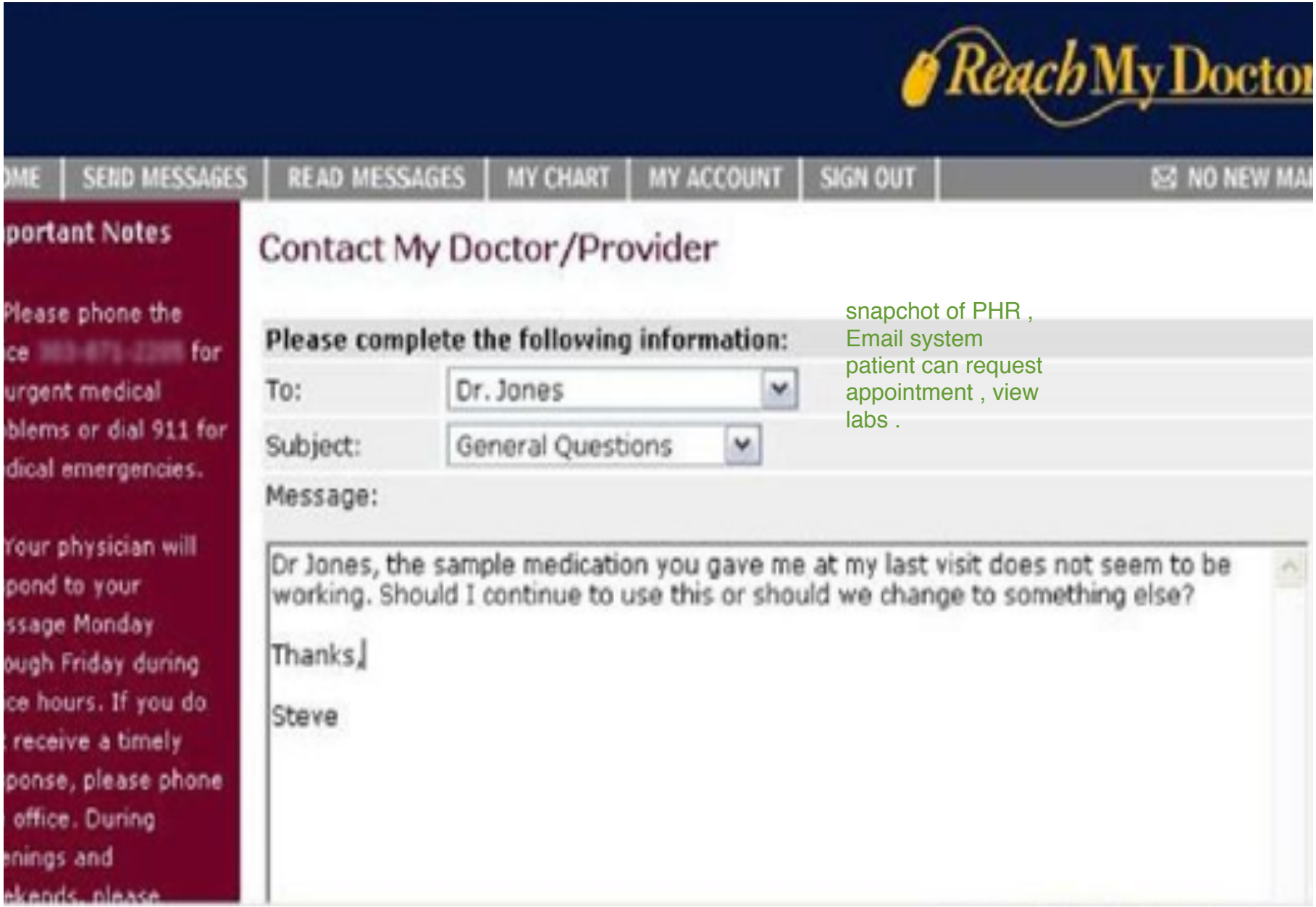
- Personal Health Record: Internet based- set of tools that allows people to access and coordinate their life-long health information and make appropriate parts of it available to those who need it

patient portals: provided by health care. Differs from personal health records that it's only one organization.

Personal health record: promote and maintain health, commercial base

** all of them share the same idea: that the patients can accesses their own files in the web, consult and see the recent results **

http://ww.webcitation.org



snapchot of PHR , Email system patient can request appointment , view labs .

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Reason for Appointment (Optional)
I need my yearly physical exam
Special Requests, Comments, etc.
Calendar
Date Requested:
Time
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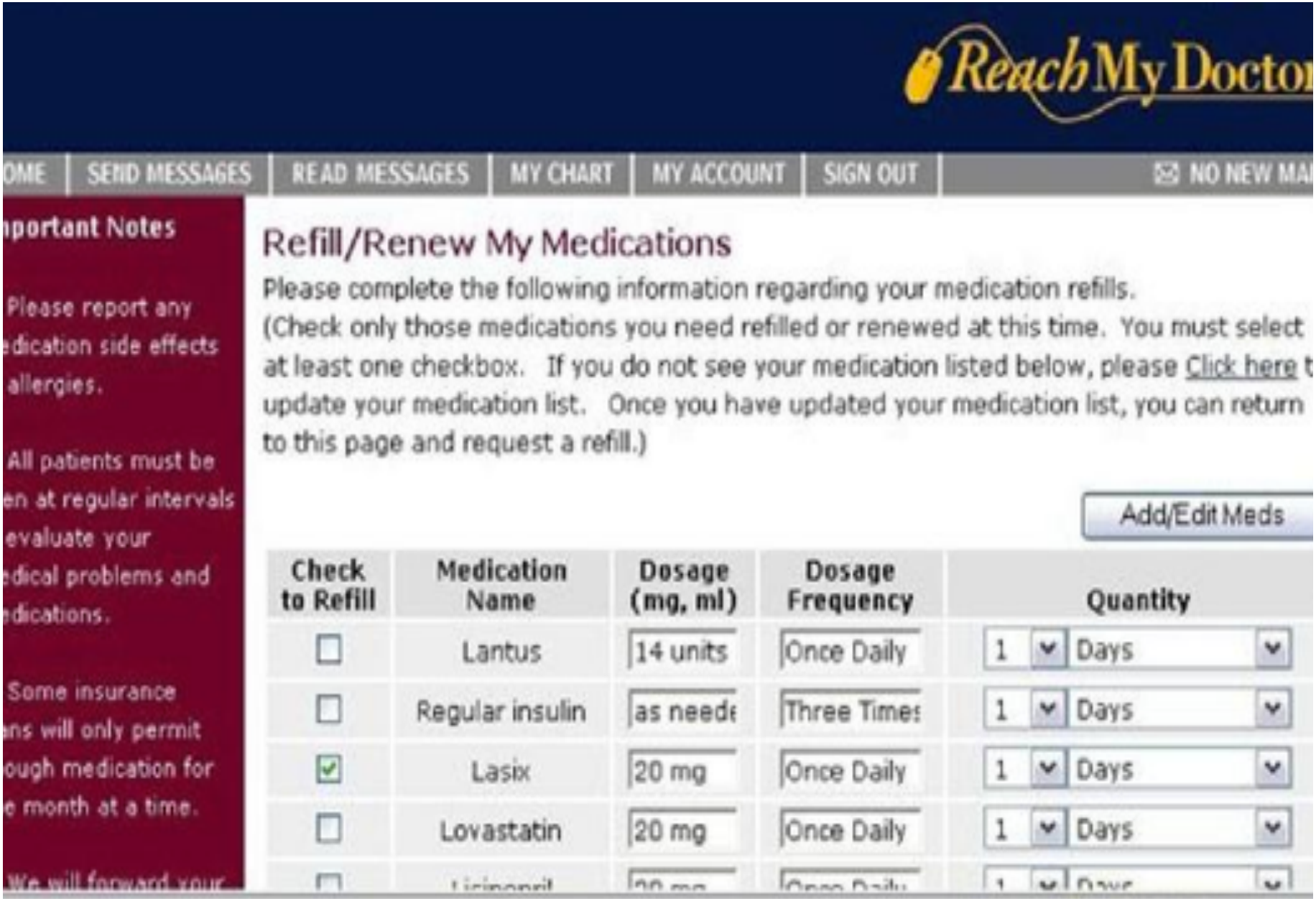
Send Appointment Request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(Check only those medications you need refilled or renewed at this time. You must select at least one checkbox. If you do not see your medication listed below, please Click here t update your medication list. Once you have updated your medication list, you can return to this page and request a refill.)
Add/Edit Meds
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Medication Name
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Lantus
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To receive a referral to a specialist, please complete the following:
Specialist Type
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Medical or Surgical Problem (Describe)
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Have you seen this specialist before?
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Have you consulted your primary care physician for this problem?
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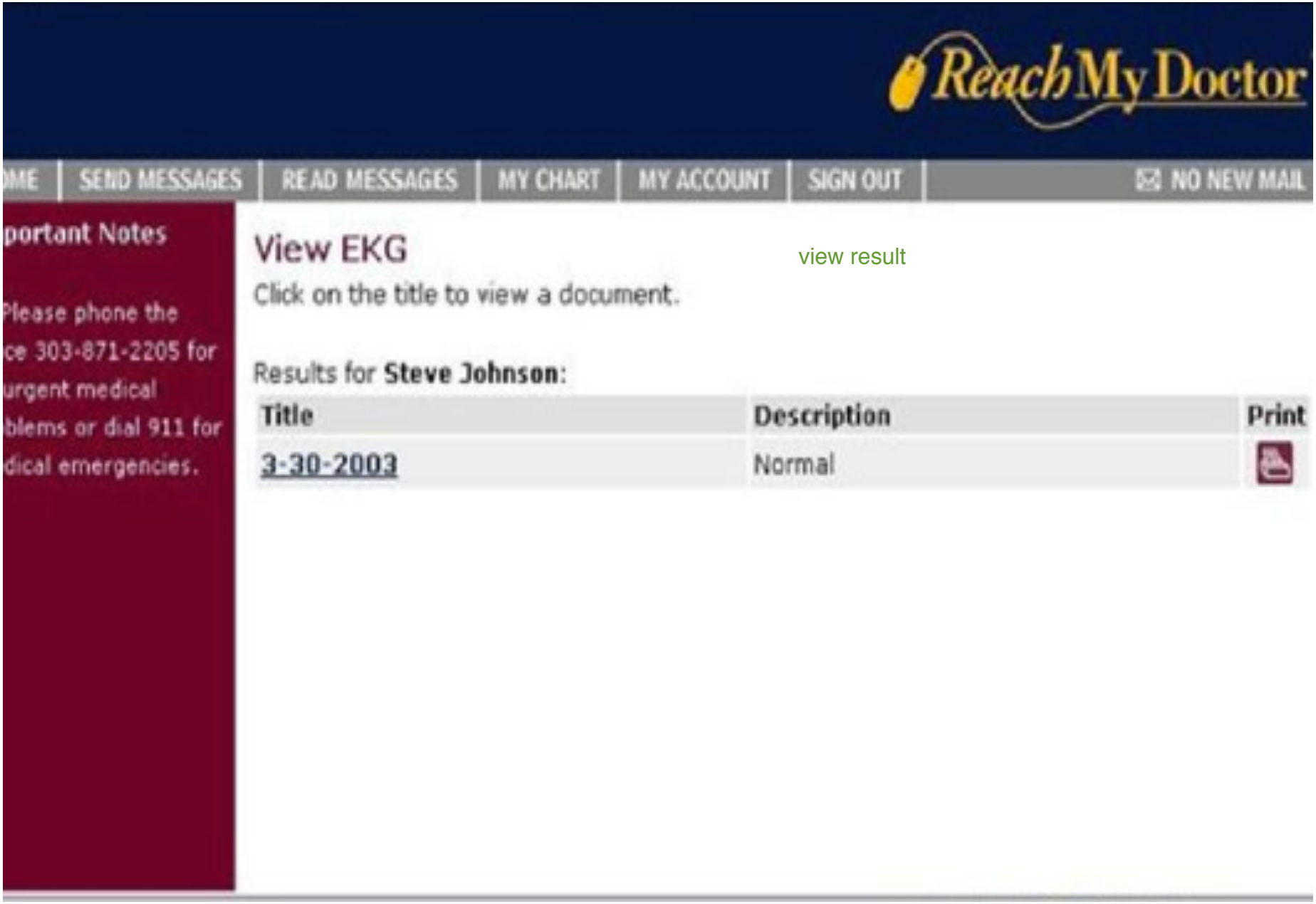
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View EKG
Click on the title to view a document.
Results for Steve Johnson:
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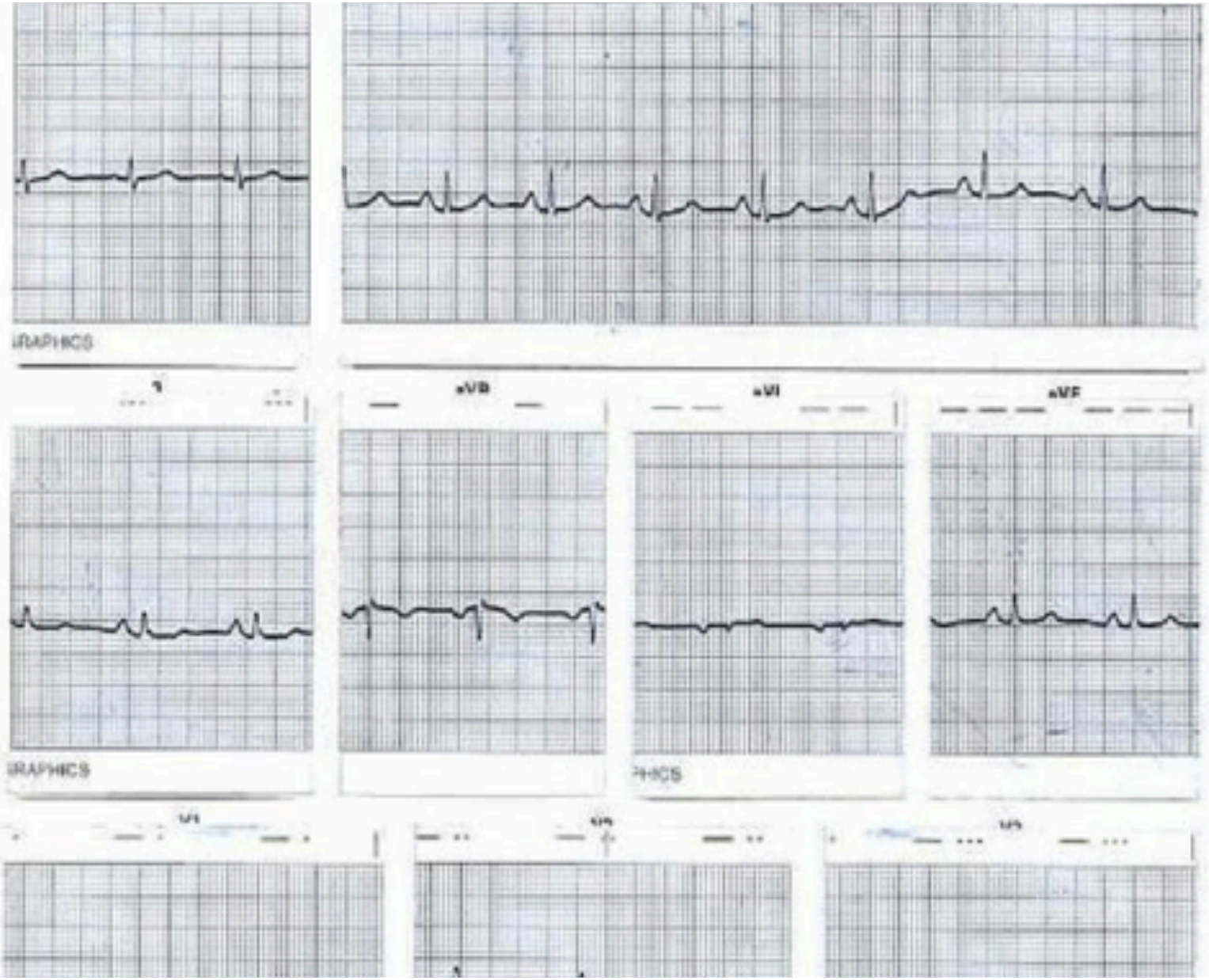
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Consumer Health Informatics

- Is not restricted to the use of computers and telecommunications but also includes:
  - The delivery of information to patients through other media: the theoretical framework of consumer informatics, for example the analysis of their information needs, is independent of the media through which the information is presented.

Consumer Health Informatics Systems

- Consumer health informatics can be organized into three general systems that:
  - *provide* health information to the user (one-way communication)
  - *tailor* specific information to the user's unique situation (customized communication)
  - allow the user to *communicate* and *interact* with health care providers or other users (two-way communication)

Consumer Health Informatics Systems

- **One-way communication:** CD-ROMs, on-line health articles

- **Tailor:** automated systems that obtain information from the consumer about his or her general health or other health-related factors (such as family disease histories and smoking habits) and, on the basis of this information, suggest a need for preventive health procedures (such as mammograms), or identify actions to curb high-risk behaviors.

- **Two-way communication:** electronic mail, electronic bulletin boards, on-line discussion groups.

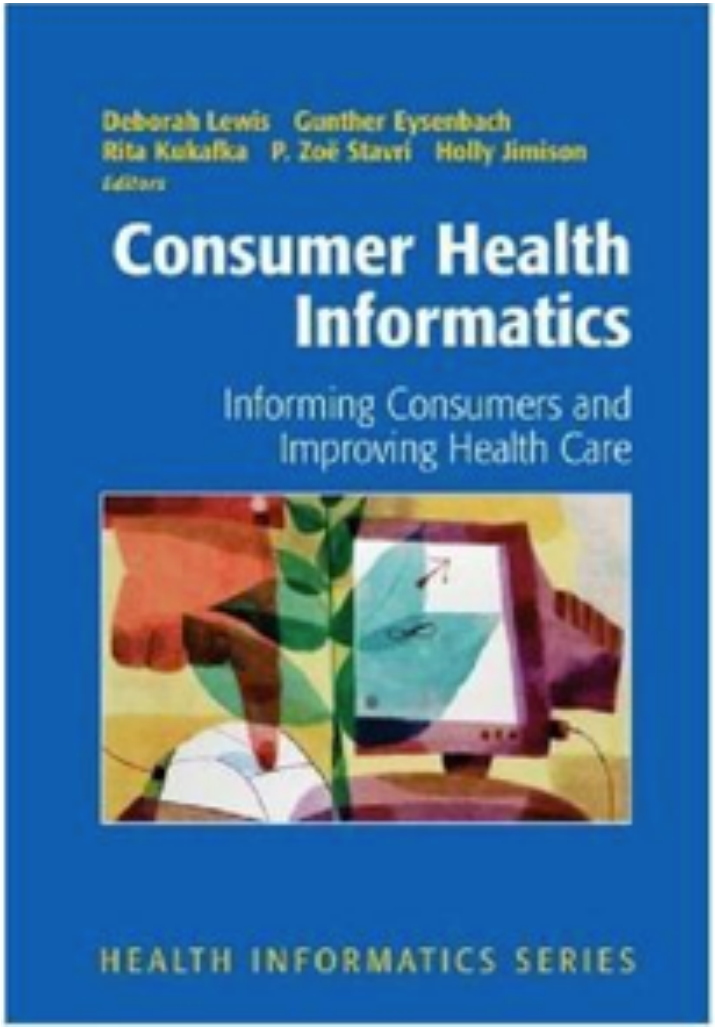
  it's like a discussion where anyone can ask questions for others to answer.

Roles of Health Professionals in CHI

- Professionals serve as sources of content
- Professionals provide important guidance in moderating public electronic discussion groups and responding to patients' electronic messages
- Clinicians become information brokers and interpreters for patients.

The Future Trends

Is for:

Consumer Health Informatics

- Thank you