Interpersonal interactions in health care settings
An ecological model: Interpersonal communication takes place within multiple contexts.
Interpersonal communication is a dynamic and complex process

• Words and ideas mean different things to different people.

• Information is conveyed simultaneously through verbal and nonverbal channels.

• Communicators are interdependent and adaptive.

• Communicators create shared meaning together.
Information Processing

A multi-step process

Exposure/perception
Attention
Comprehension
Relevance
Acceptance
Retention
Response (action/inaction)
Communication and Cognition

• As we communicate, we have many thoughts, expectations, plans and goals
• Taking in and using information requires effort, ability and motivation
• Many cognitive biases can change the way we perceive and respond to information
  
  Examples: Selective perception, Confirmation bias, Framing effect
Meeting Cognitive Challenges

- People have limited capacity to process information. They use cognitive short-cuts.

- People use two major modes for processing information: analytic (deliberate, rational, slower); experiential (automatic, intuitive, fast).

- Without usable information to inform choices, people can feel disempowered, de-motivated.

- How can we inform, without overloading decision makers?  
  – keep it short and simple,  
  – make it interesting and relevant,  
  – increase usability to fit personal interests, needs.

Emotions and Communication

• Taking in health messages can elicit (+) and (-) emotions, often fear.

• Emotions can distort information and/or change our responses to it.

• Messages can elicit different cognitive and emotional responses which lead to different processes and different outcomes.

• A useful model for understanding responses to health messages involving fear...
The Extended Parallel Process Model (Witte, 1998)
Factors shown to influence interpersonal communication in health care settings

- Age, gender, education, ethnicity, culture differences
- Hearing or speaking problems
- Physical, social, cultural environment
- Language, literacy/numeracy
- Provider communication style
- Patient trust and relationship quality with provider
- Cognition – capacity, beliefs, cognitive biases
- Motivation, self-efficacy
- Other mental phenomena – emotion, stress, “noise”
- Time
Age-adjusted prevalence of respondents who say that their physician always explains things so they can understand in the 2003 Health Information National Trends Survey (HINTS).

<table>
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<tr>
<th>Race/Ethnicity</th>
<th>Education</th>
<th>Income</th>
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<tbody>
<tr>
<td>White</td>
<td>Less than high school</td>
<td>&lt; $25,000</td>
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<td>English-speaking</td>
<td>High school</td>
<td>$25,000 to &lt; $34,999</td>
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<td>Hispanic</td>
<td>Some college</td>
<td>$35,000 to &lt; $49,999</td>
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<td>Spanish-speaking</td>
<td>College graduate</td>
<td>$50,000 to &lt; $74,999</td>
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<tr>
<td>Hispanic</td>
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<td>≥ $75,000</td>
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Ways to improve effectiveness of interpersonal communication about health

- Politeness, respect, likeability
- Cultural sensitivity
- Listening skills
- Nonverbal skills
- Empathy
- Adequate time
- Reinforcement of key messages
  - Written materials, repetition, teach-back method
Printed Informational Materials
Evidence-based practices for printed health information

• Provides info on both benefits and risks
• Decision aids improve decision quality
• Presentation of numerical data (language, diagrams, graphs, charts)
• Text + pictures ↑ comprehension
• Larger picture size ↑ comprehension, recall
• Clear, simple drawings that support text
• Narrative format vs. factual/statistical format
Print Layout

Plain Language / High readability

• Present information clearly, in logical order
• 4th to 8th grade reading level
• Serif type style, minimum 12 pt. font
• High contrast print, left-aligned, max. 5” lines
• Illustrations labeled clearly; close to related text
• Everyday words and examples
• Explain technical terms; avoid unless necessary
• Active voice; short and simple sentences
• Consistent, easily recognized headings
• Main points in bold or highlights
AzCERT Warfarin Patient Education Project

Methods and Materials

• Evidence-based patient education intervention
  – Coumadin clinic nurses deliver
  – Teach-back method
  – Engaging print materials

• Evaluation
  – Interrupted time series measuring change in INR scores
  – Clinician observation and scoring of patient knowledge, adherence

• Educational materials development
  – Advisory panel of national experts
  – Intervention site clinicians
  – Patient focus group

• Patient education materials posted at www.azcert.org
**MY MEDICINES**

Use this form to keep track of all your **prescriptions**, **over-the-counter medicines** and **supplements**. Keep it up-to-date and always carry it with you. Show it to your doctors and pharmacists at each visit and ask them to check for unnecessary duplications or medicines that could interact to cause harm.

Check the ones you use and write medicines in the chart.

- Allergy medicines
- Antacids
- Antibiotics
- Cold, flu or cough medicines
- Contraceptives
- Blood pressure or heart medicines
- Hormones
- Laxatives
- Medicine patches
- Pain medicines
- Sleeping pills
- Weight loss pills
- Vitamins, minerals
- Supplements or herbal remedies

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<thead>
<tr>
<th>Name of medicine or product</th>
<th>How much do I take?</th>
<th>When and how do I take it?</th>
<th>Why do I take it?</th>
<th>Date I started it</th>
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<tbody>
<tr>
<td>Example: Naproxen</td>
<td>1 tablet, 250 mg</td>
<td>2 times/day, with food</td>
<td>Arthritis</td>
<td>7/31/2007</td>
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Medicines to avoid due to allergies or side effects:  

Doctor to call first: ____________________________  

Doctor's phone: ____________________  

Pharmacy phone: ____________________  

Find more copies of this form at www.azcert.org
Features of different channels for conveying health information

- **Interpersonal communication** is multi-channel, adaptive, personal, engaging; correctable; more effective than print materials, but expensive, with limited access.

- **Printed materials** are plentiful, less expensive and accessible to readers, but single channel, impersonal, not correctable, less engaging; can be confusing, boring, misunderstood, discarded.

- **Web-based written “push” information** (news, email blasts, targeted newsletters) is inexpensive, over-abundant, publicly accessible to interested readers, not accessed by nonreaders.

- **Mass media** promotes awareness, salience and learning through redundancy, but information is impersonal, often incomplete, inaccurate, or biased; difficult to correct.
References


