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Fall, 2006

Comm 511. Patient-Provider Communication: Interpersonal Experience, Message Design, and Information Technology

Professor Peter Clarke, Annenberg School for Communication
and Department of Preventive Medicine, Keck School of Medicine

Mondays, 6:45 - 9:45 p.m., ASC (**to come**), 4 crs.

Contact information: chmc@usc.edu; (213) 740-0940; office hours 5:30 - 6:30 p.m. on Mondays, or by appointment

This course divides into four Parts. We start by examining the environments where patient-provider communication takes place. Then, we dig deeply into the course's three principal subjects: interpersonal experience, message design, and information technology.

For each Part, the syllabus provides you a brief overview that includes learning objectives. The Part's required readings are listed, and oral or written assignments are shown in boxes. I have carefully chosen readings and created assignments that mimic tasks that professional health communicators and managers actually perform in real jobs. Discussions in class will also echo the conversations and understandings that one finds among working professionals. The Calendar of Activities identifies readings you should complete each week.

To the best of our ability we shall avoid artifacts of schooling that one seldom finds in the outside world, such as tests or examinations. I will, however, help you cultivate skills of retrieving information using bibliographic search tools and the Internet. These skills are assets you can bring to any job that you fill, providing a competitive advantage over others who envy your position and salary.

Before getting started, however, we should linger briefly on the premises that underlie our interests. Our work together hinges on some simple, but neglected facts. Health care settings contain physical, behavioral, and informational elements. All facets of this ecology communicate powerfully, if often subconsciously, to patients and clinicians as they collaborate in medical healing or in palliation. Interdependencies among these elements remain woefully unappreciated.

The physical includes bounded spaces, views through windows, furnishings, illumination, surfaces, temperature, scents, foliage, ambient sound, air movement and quality, and costumes worn by participants. The behavioral includes all patterned actions, especially bureaucratic protocols for admitting patients and their families, and

advancing them systematically across medical "zones" and through time. The informational includes spoken words, vocal cues, gestures, postures, facial expressions, signage, consent forms, drug labels and inserts, brochures, and a host of other media.

This ecology must be brought into greater harmony, consistent with the diagnostic and therapeutic activities that take place. Most importantly, this harmony should affirm and not erode patients' (and their significant others') varying self identities, should trigger creative problem solving and not suffocate it, should sustain humor and not provoke anger or resignation.

We will discover how far short of such ideals today's delivery of care falls. We will explore promising avenues for improvement by considering research into interpersonal encounters and principles of design for health messages. We also will weigh the benefits and liabilities from new information technologies, whose inventors may be whizzes at solving software challenges, but are often numb to the requirements of humane communication.

Course Sections

Part I. The physical envelope for health communication and care.

Before we study the principal forms of patient-provider communication, we will examine the surrounding envelope of built spaces and other physical trappings. Patients, indeed all people, interpret communication in light of the places where messages are exchanged. For example, patients infer much about the competence and temperament of physicians, drawing on the work spaces that these providers inhabit and compel their visitors to experience. The character of waiting and examination rooms matters. In short, an atmosphere may strengthen or undercut therapy.

Learning objectives. With the aid of Part I, you will become alert to physical environments wherever you experience them, in medical or other settings. Every time you enter a built space, you will consciously wonder, instead of vaguely sense: is this place calming or intensifying my level of stress; is this place promoting or hindering social attachments; is this place supporting or interfering with my sense of personal control?

Required readings for Part I.

[1] H. Rubin, A. Owens, and G. Golden (1998). *Status Report: An Investigation to Determine Whether the Built Environment Affects Patients' Medical Outcomes* (Baltimore: The Center for Health Design). COURSE PACK.

[2] R. Ulrich (2001). "Effects of healthcare environmental design on medical outcomes." COURSE PACK.

[3] M. Schweitzer, et al. (2004). "Healing spaces: Elements of environmental design that make an impact on health." *Journal of Alternative and Complementary Medicine*, 10:S71-S73. COURSE PACK.

[4] R. Fetz and G. Vance (2004). *Diagnosing Design*. Google the title and authors' last names for online text and hotlinks you should follow up, including the Academy of Neuroscience for Architecture.

[5] Browse these other online resources: a) Google "evidence-based design" as an exact term, clicking on entries that interest you; b) go onto the website for *Health Care Design Magazine*; followup with its archived article about evidence-based design; c) go the Center of Health Design (www.healthdesign.org) and skim the narrative of the Center's 2004 report by Ulrich and Zimring, The Role of the Physical Environment in the Hospital of the 21st Century.

[6] Press release from the Robert Wood Johnson Foundation (June 7, 2004), "Evidence-Based Hospital Design Improves Healthcare Outcomes for Patients, Families and Staff." COURSE PACK.

[7] K. Day, D. Carreon, and C. Stump (2000). "The therapeutic design of environments for people with dementia: A review of the empirical research." *The Gerontologist*, 40:397-416. COURSE PACK.

Class Participation Assignment

I will assign each student an empirical article about the influence of design on health. (Many of these works appear as referenced sources in the assigned readings.) You will prepare a ten-minute class presentation, with overheads or PowerPoint images, that depict the study's: a) rationale and aims; b) methods; c) results; and d) implications for the impact of environmental design on health communication and care. Come to know your study intimately, by also reading its referenced works and going online to search about its topics. Presentations in class on (**to come**).

You can also locate your own article, to substitute for the one I give you, through a variety of strategies. One is to browse the journal, *Environment and Behavior*. Go online and search its archive using the keyword term, (medical OR health) AND patients. Alternatively, you can search the *American Journal of Public Health*, again online, entering this keyword term (built environment) in the abstract window and marking "phrase".

Written Assignment

Go online to The Center for Health Design. Identify a recent project or award winner. Research that facility using bibliographic tools and Google (I will help you learn how to use these skillfully). Contact the facility for images, drawings, and texts. Visit a nearby, comparison site. Write a 4-5 page report explaining the award-winning site's excellence (include any drawbacks you find, too), comparing it to the comparable place you visit in the Los Angeles area. Attach all relevant materials you have unearthed. Due in class on (**to come**).

[8] G. Evans and J. McCoy (1998). "When buildings don't work: The role of architecture in human health." *Journal of Environmental Psychology*, 18:85-94. COURSE PACK.

Part II. Interpersonal experience in patient-provider communication.

We will look at evidence about three facets of this topic: a) purposive, largely verbal communication during medical consultations; b) non-verbal or expressive signals, mostly unconscious, between providers and patients; and c) relationships between patients and their care-providers at home and in the community--the unpaid and "amateur" corps of people responsible for much of the healing usually credited to medical science.

Learning objectives. In Part II, you will learn how to diagnose pathologies in face-to-face exchanges that contribute to patients' staggering rates of noncompliance with medical regimens, their needless despair over treatments and side effects, and social isolation they often suffer in the face of chronic illness. You will also start to develop a portfolio of steps that third parties can take to encourage good communication among providers, patients, and patients' significant others.

Required readings for Part II.

[1] C. Braddock, et al. (1999). "Informed decision making in outpatient practice: Time to get back to basics." *Journal of the American Medical Association*, 282:2313-20. COURSE PACK.

[2] J. Schneider, et al. (2004). "Better physician-patient relationships are associated with higher reported adherence to antiretroviral therapy in patients with HIV infection." *Journal of General Internal Medicine*, 19:1096-1103. COURSE PACK.

[3] J. Hall and D. Roter (2002). "Do patients talk differently to male and female physicians? A meta-analytic review." *Patient Education and Counseling*, 48:217-24. COURSE PACK.

[4] W. Levinson, R. Gorawara-Bhat, and J. Lamb (2000). "A study of patient clues and physician responses in primary care and surgical settings." *Journal of the American Medical Association*, 284:1021-7. COURSE PACK.

[5] G. Elwyn, et al. (2004). "Achieving involvement: Process outcomes from a cluster randomized trial of shared decision making skill development and use of risk communication aids in general practice." *Family Practice*, 21:337-46. COURSE PACK.

[6] M. Rich, et al. (2000). "Asthma in life context: Video intervention/prevention assessment (VIA)." *Pediatrics*, 105:469-77. COURSE PACK.

[7] N. Arora (2003). "Interacting with cancer patients: The significance of physicians' communication behavior." *Social Science & Medicine*, 57:791-806. COURSE PACK.

Written Assignment

Read Jerome Groopman, *The Anatomy of Hope* (New York: Random House, 2004). Review this book in 6-7 pages, as one might for a thoughtful magazine that covers contemporary social issues. Inform your reader about what he or she will discover in each of the eight chapters, and about Groopman's style and thoroughness in tackling how people prevail in the face of illness. What issues about communication does Groopman address, and how adequately--in your opinion? (Be alert to the fact that he seldom uses the term, communication, even when writing about it.) By your review's conclusion, you should have conveyed reasons that you recommend or advise against the book for lay readers.

For model book reviews, go online to the Sunday New York Times Review of Books (requires a free registration) or the Arts&Letters Daily "new books" column. You might also try Googling this term: book reviewing how to. You will uncover lots of guidelines. Due in class on (**to come**).

[8] W. Ferguson and L. Candib (2002). "Culture, language, and the doctor-patient relationship." *Family Medicine*, 34:353-62. COURSE PACK.

[9] J. Rosen, et al. (2004). "A new approach to developing cross-cultural communication skills." *Medical Teacher*, 26:126-32. COURSE PACK.

[10] N. Ambady and R. Rosenthal (1992). "Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis." *Psychological Bulletin*, 111:256-74. COURSE PACK.

[11] W. Levinson, et al. (1997). "Physician-patient communication: The relationship with malpractice claims among primary care physicians and surgeons. *Journal of the American Medical Association,* 277:553-9. COURSE PACK.

[12] N. Ambady, et al. (2002). "Surgeons' tone of voice: A clue to malpractice history." *Surgery,* 132:5-9. COURSE PACK.

[13] N. Ambady, J. Koo, and R. Rosenthal (2002). "Physical therapists' nonverbal communication predicts geriatric patients' health outcomes." *Psychology & Aging*, 17:443-52. COURSE PACK.

[14] P. Clarke and S. Evans, *Surviving Modern Medicine* (Piscataway: Rutgers University Press, 1998), Chs. 3-4, pp. 105-93. COURSE PACK.

Part III. Message design in health communication.

We can not hope to explore all of this vast topic, as each medium--paper, audio, video, film, web, e-mail, etc.--presents its own opportunities and constraints. We will concentrate on design issues that arise in printed communications. These constitute a huge fraction of the care system's efforts to inform or to coax patients, and to elicit information for diagnosis and treatment. Paper remains a common medium, despite the explosion of computer screens and telecommunication (see Part IV.). And, if you grasp fundamentals of good design in print you are well on your way to understanding the best ways to use other media.

Our work will begin with perspectives about the need for message design. Then, we will examine fundamental issues in design--content itself, always the preeminent concern, the organization of content, typography, use of space, and the interplay of words and images. Findings from cognitive science shed light on many challenges of presenting complex information in ways that promote comprehension and use. Methods of pre-testing designs reveal convergences between design rules that are behaviorally validated and those that arise from aesthetic values. We will consider these points, and contradictions as well. Finally, we will focus on examples of design solutions, referring to my collection of superior and flawed information products in health. Throughout, we will shed light on message literacy, legibility, and usability. You will also discover the vital role that timing plays in message design.

Learning objectives. Here, you will learn how to research and write a report to a client that analyzes faulty design in its communication tools, while suggesting practical improvements that are worth considering. You will discover how to help a client, even more importantly yourself, grasp vital relationships between message goals and message design. Even if you don't become a communication specialist yourself, your future job in health care may include hiring such expertise from vendors or supervising inside staff. You must understand the challenging, but exciting work to be done.

Required readings for Part III.

[1] K. Schriver, *Dynamics in Document Design* (New York: Wiley, 1997), Ch. 3-7.

[2] R. Wurman, *Information Anxiety 2* (Indianapolis: Que, 2001), Ch. 2. COURSE PACK.

[3] E. Tufte, *The Cognitive Style of PowerPoint* (Cheshire: Graphics Press, 2003).

[4] E. Tufte, *Textbooklet: Visual and Statistical Thinking* (Cheshire: Graphics Press, 2004).

Written Assignment

Case Study 1 represents your assignment in Part III. You will find a template guiding your work toward the end of this syllabus. Most students will study print messages by a health non-profit of your choosing. Others may elect to study messages used at Children's Hospital Los Angeles, by CHLA's unit that provides psycho-social support to children and families struggling with pediatric cancers. I will interview students interested in choosing this site for their case study.

This report requires a considerable amount of independent search for, and integration of literature by you. So start early. Your text will probably require 18-24 pages, plus attachments and references. Due in class on (**to come**).

[5] B. Laurel (ed.), *Design Research: Methods and Perspectives* (Cambridge: MIT Press, 2003), Chapter by Nathan Shedroff. COURSE PACK.

[6] M. Kinzie (2005). "Instructional design strategies for health behavior change." *Patient Education and Counseling*, 56:3-15. COURSE PACK. Also, Google (all terms) conditions learning gagne theories; and (any term) keele tip. Browse through sites that explain R. Gagne's theories about "conditions of learning" and applications to instructional design. Consult other approaches you find, as well, attributed to such people as Bandura.

Part IV. Information technology (IT) in care delivery.

ITs are proliferating, helping shape patient-provider communication, either incidentally or by intent. By some accounts, the care industry now spends $27 billion annually on IT--though as a percentage of capital expenditure, medicine invests less in this sector than financial institutions, retailing, or manufacturing. Some observers estimate that every $1 invested in health ITs reaps $5 in cost savings, plus significant

increments in the quality of care. Sometimes this optimism is warranted, and other times not.

In class we will consider ten of the most common or rapidly-emerging tools. You are free to select one of these, or a different kind of application for your Case Study 2 (see box below and template at the end of this syllabus).

Learning objectives. You will grasp the implications, positive and negative, of a wider adoption of new technologies that help care systems, promoters claim, bridge the "quality divide" between current performance and legitimate expectations. You will learn how ITs are evaluated, compared to customary care. You will become an authority about at least one IT. You will understand how ITs influence patient-provider relations. And you will learn fruitful ways to understand the full spectrum of computer-based or telecommunication-enhanced tools now arriving in the health care marketplace.

Required readings for Part IV.

The first four articles provide an introduction to many of the benefits and costs from adopting ITs in clinical practice. I've listed the remaining ten readings along with the information tools that they explore in depth.

[1] D. Bates and A. Gawande (2003). "Improving safety with information technology." *New England Journal of Medicine*, 348:2526-34. COURSE PACK.

[2] J. Billings (2004). "Promoting the dissemination of decision aids: An odyssey in a dysfunctional health care financing system." *Health Affairs*, Suppl Web Exclusive, Oct. 7, 2004. COURSE PACK. Also, go online to browse other Suppl Web Exclusives posted by *Health Affairs* on this date. These will introduce you to spatial variations in the quality of U.S. health care and barriers to the practice of evidence-based medicine. Enter the journal's home page, and click from there.

[3] A. Garg, et al. (2005). "Effects of computerized clinical decision support systems on practitioner performance and patient outcomes: A systematic review." *Journal of the American Medical Association*, 293:1223-38. COURSE PACK.

[4] R. Wears and M. Berg (2005). "Computer technology and clinical work: Still waiting for Godot." *Journal of the American Medical Association*, 293:1261-3. COURSE PACK.

Information Technologies	Required Readings
[5] Internet web sites	P. Thakurdesai, P. Kole, and R. Pareek (2004). "Evaluation of the quality and contents of diabetes mellitus patient education on Internet." *Patient Education*

	and Counseling, 53:309-13. COURSE PACK.
[6] Patient decision aids	A. Rostom, et al. (2002). "A randomized trial of a computerized versus an audio-booklet decision aid for women considering post-menopausal hormone replacement therapy." *Patient Education and Counseling*, 46:67-74. COURSE PACK.
[7] Tailored messaging in primary prevention	E. Hovy, S. Evans, P. Clarke, and A. Philpot (2004). *Tailored Generation of Recipes for Low-Income People* (Progress Report). COURSE PACK.
[8] Telemedicine consultations	J. Whited, et al. (2003). "An economic analysis of a store and forward teledermatology consult system." *Telemedicine Journal and E-Health*, 9:351-60. COURSE PACK.
[9] Store-and-forward referrals	M. Tennant, et al. (2001). "Identification of diabetic retinopathy by stereoscopic digital imaging via teleophthalmology: A comparison to slide film." *Canadian Journal of Ophthalmology*, 36:187-96. COURSE PACK.
[10] Computer-based psychotherapy	K. Cavanagh and D. Shapiro (2004). "Computer treatment for common mental health problems." *Journal of Clinical Psychology*, 60:239-51. COURSE PACK.
[11] Decision-support systems for providers	K. Buller-Close, D. Schriger, and L. Baraff (2003). "Heterogeneous effect of an emergency department expert charting system." *Annals of Emergency Medicine*, 41:644-52. COURSE PACK.
[12] Electronic order entry and medical records	R. Koppel, et al. (2005). "Role of computerized physician order entry systems in facilitating medication errors." *Journal of the American Medical Association*, 293:1197-1203. COURSE PACK.
[13] Automated reminder systems	P. Dexter, et al. (2001). "A computerized reminder system to increase the use of preventive care for hospitalized patients." *New England Journal of Medicine*, 345:965-7. COURSE PACK.
[14] Consumer-oriented body imaging	G. Kolata (2005). "Rapid rise and fall for body-scanning clinics." *New York Times*, Apr. 23, p. 1, 17. COURSE PACK.

Written Assignment

Case Study 2 represents your assignment in Part IV. You will find a template guiding your work for this case study, at the end of this syllabus. I will confer with each of you as you are selecting the IT you prefer, so that this aligns with your personal or career interests as closely as possible.

This report (probably running 15-17 pages) requires a considerable amount of independent search for, and integration of literature by you. So start early. Due in class on (**to come**).

Housekeeping Details

Books and other materials you buy: a) Jerome Groopman, *The Anatomy of Hope* (New York: Random House, 2004); b) K. Schriver, *Dynamics in Document Design* (New York:

Wiley, 1997); c) E. Tufte, *The Cognitive Style of PowerPoint* (Cheshire: Graphics Press, 2003); d) E. Tufte, *Textbooklet: Visual and Statistical Thinking* (Cheshire: Graphics Press, 2004); and e) the COURSE PACK. Groopman and Schriver are available at book stores or from the usual online vendors. You must order Tufte's books from his website; allow a couple weeks for mailing. I will sell you the COURSE PACK at the copying cost that I incurred.

Overview of written assignments: Organization and fluency of expression count heavily in evaluating the quality of your work. These qualities include grammar and spelling. Proof your work carefully; ask a friend to read your papers and comment. Plan plenty of time to allow editing and rewrites. Confer with the Writing Consultants in Taper Hall; they are very helpful. Use APA citation style. Late papers receive zero credit, unless you present a documented medical reason. Note that your submitted work consists of one in-class report and four written assignments.

Grade allocation scale (100 points total):

Participation in class	10
Part I written assignment	10
Part II written assignment	20
Part III written assignment	30
Part IV written assignment	30

It is essential that you remain current with readings and participate in class. Be comfortable about disagreeing with me or your classmates. All of us benefit from an exchange of ideas, and gain little from conformity. I can't recall the last time a student asked a "dumb question" in class, so speak up with your doubts or confusion. Feeling puzzled spurs one to think.

The course's letter-grades will be awarded according to the following schedule:

A+	96-100
A	91-95
A-	86-90
B+	81-85
B	76-80
B-	71-75
C	61-70
D	0-60

Calendar of Activities

Week	Content	Required Readings (prior to class)
1	Introduction: including backdrop for the course (the quality chasm in U.S. health care, disparities in access, and social gradients in outcomes); plan of topics and assignments; vocational importance of course topics and assignments	
2	Part I: The physical envelope	1, 2, 3, 6
3	continue	assigned source, plus
4	continue	4, 5, 7, 8
5	Part II: Interpersonal experience	1, 2, 3, 4, 7
6	continue	5, 10, 11, 12, 13
7	continue	6, 8, 9, 14
8	Part III: Message design	1 (Chs. 3-4), 2
9	continue	1 (Chs. 5-7), 6
10	continue	4
11	continue	3, 5
12	Part IV: Information technology	1, 2, 3, 4
13	continue	5, 6, 7
14	continue	8, 9, 10
15	continue	11, 12, 13, 14

ACADEMIC INTEGRITY STATEMENT

The Annenberg School for Communication is committed to upholding the University's Academic Integrity code as detailed in the SCampus Guide. It is the policy of the School of Communication to report all violations of the code. Any serious violation or pattern of violations of the Academic Integrity Code will result in the student's expulsion from the Communication major or minor.

ADA COMPLIANCE STATEMENT

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. – 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Comm 599. Patient-Provider Communication: Interpersonal Experience, Message Design, and Information Technology

Case Study 1: Analyzing and Improving Messages in a Nonprofit's Communication Program

You will select a nonprofit organization that provides some form of health-related outreach. Focus on this organization's clinical or client-directed communications, or its efforts to lower the public's health risks--not fund raising or reporting to higher authorities. You will: a) visit the organization's site and interview key staff responsible for developing client-directed communication; b) select paper-based messages that are critical to the organization's success in enrolling clients or conducting prevention in communities; and c) analyze the design and delivery of these messages, recommending specific improvements that should be considered, and current practices that probably blunt effectiveness of the messages.

Organize your report into these six sections. I've identified background relevant to each.

	Dimensions	Helpful Background
1	Message content: The goals that communications serve, or should serve[1]	Cochrane Review, PsycInfo search, and other excavation of literature about aims of outreach
2	Means of segmenting the marketplace of potential clients into highest-opportunity targets[2]	Online materials or literature using KWs like market and segmentation
3	Message design	Required readings in Part III, plus class discussions and examples
4	Choice of media: Should alternatives to print be considered, and why?	Online materials or literature using KWs like media richness and synchronicity
5	Timing of messages	Online materials or literature using KWs like teachable moments and health
6	Physical environment in which messages are typically delivered, or consumed	Required readings in Part I, plus class discussions and examples

[1] Goals might include: accrue clients, determine client needs, retain clients, control symptoms, guide clients along appropriate diagnostic or therapeutic paths, reduce public risks of morbidity, or of mortality, or something else. Goals may have cognitive, emotional, or behavioral components, or some mixture of these. Explain, referring to the behavior theories (the conditions of learning, reasoned action, fear appeals, social-cognitive, stages-of-change, whatever) that appear to rationalize the choice of content.

[2] These may be based on geographic, demographic, and/or psychographic factors.

Comm 599. Patient-Provider Communication: Interpersonal Experience, Message Design, and Information Technology

Case Study 2: Guidelines for Preparing Your Case Study of an Information Technology in Health Care

You have selected a specific application of information technology (IT). Your case study will rely mostly on published accounts about it, although you can also learn a lot by interviewing health practitioners or other experts. Your analysis should include the following six dimensions; organize your report into these sections:

	Dimensions
1	How does your IT actually operate or work? Explain its features in plain English.
2	In what ways are the health care issues your IT addresses ripe for improvements in quality of care, the costs and other barriers limiting access to care, or both?
3	Review evidence about your IT's impact on: a) medical documentation; b) appropriateness of treatment; c) patients' morbidity or mortality; d) providers' and patients' satisfaction; e) uniformity of care across geographic boundaries; and f) other relevant outcomes.
4	Review evidence about your IT's relative sensitivity and specificity (if appropriate) compared to conventional care. What are the IT's costs, per patient, and cost-benefit ratios compared to conventional care. What constitutes conventional care?
5	As nearly as you can discern, what are the behavioral disincentives (organizational needs and routines, reimbursement regimes, habits and prerogatives among providers, resistance by patients, etc.) that might discourage widespread use of your IT? What are the attractions that might encourage use of the IT?
6	In what ways is your IT reshaping patient-provider communication? Even if you can't find research evidence about this question, speculate in an informed way (referring to course readings) about probable answers to this question.