

The Health Communication Path Thus Far: More Evolution than Revolution

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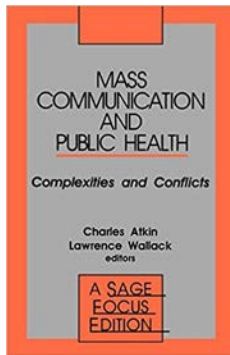
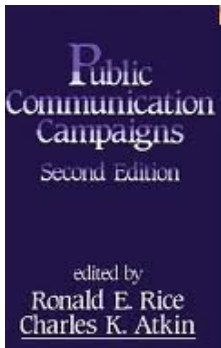


The University of Texas at Austin

Center for Health Communication

Moody College of Communication & Dell Medical School

Charles K. Atkin (1945-2012)



“Health communication is a bit of a thankless area because the health people don’t like you, and the communication people don’t like you.”
(Chuck Atkin, *IJOC*, 2012)

Old Health Communication Definitions

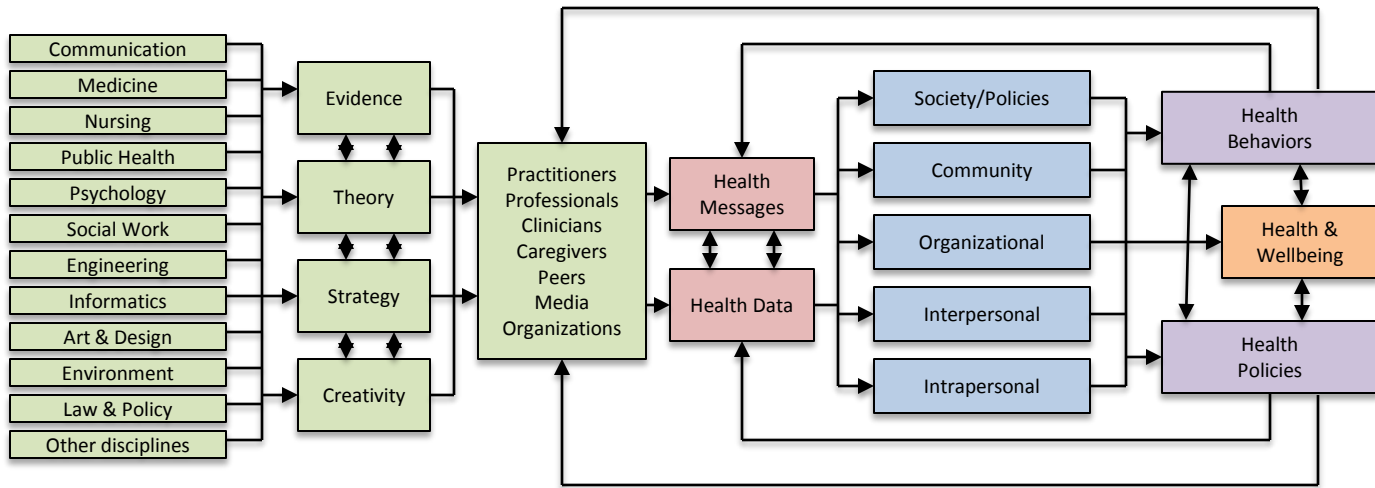
“The study and use of communication strategies to inform and influence individual decisions that enhance health.” (CDC & NCI)

“The art and technique of informing, influencing, and motivating individual, institutional, and public audiences about important health issues.” (US DHHS)

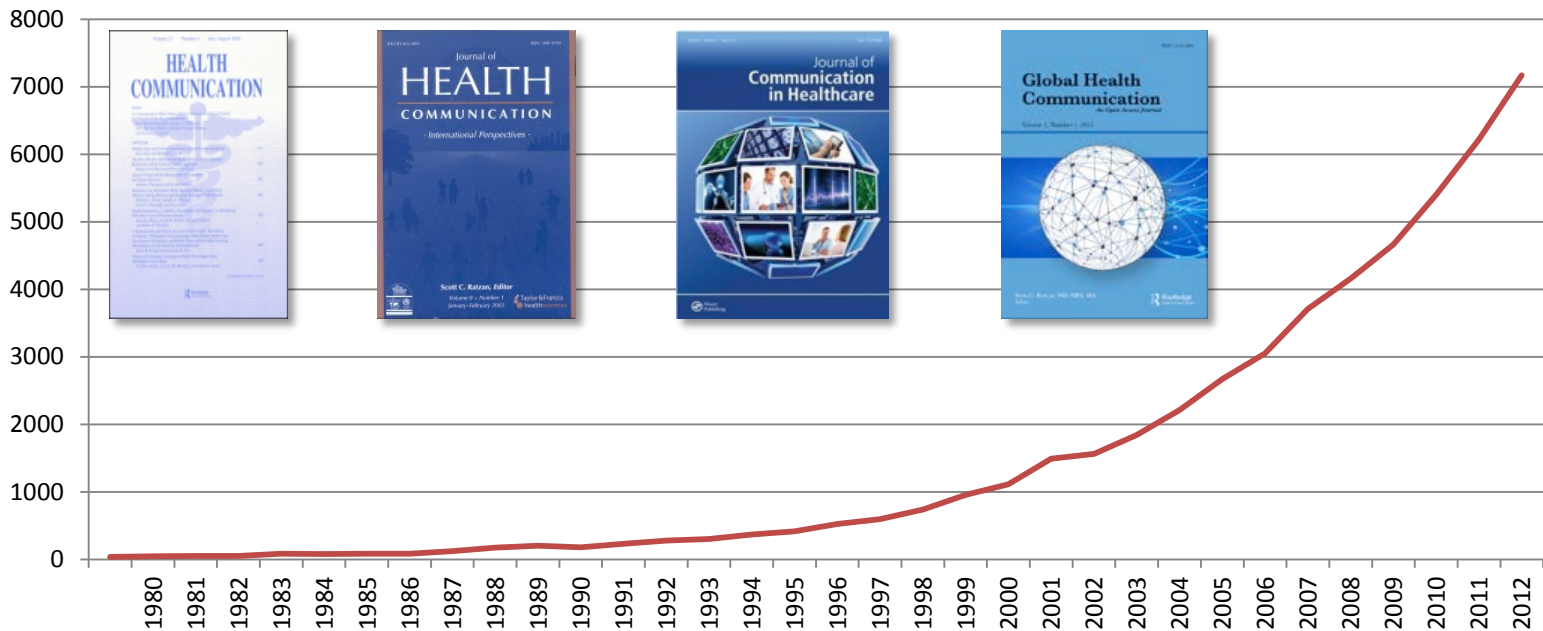
New Health Communication Definition

“A multidisciplinary field of study and practice that integrates evidence, strategy, theory, and creativity, to improve the health and wellbeing of individuals, organizations, and communities by developing, generating, and delivering messages and data, to influence health behaviors and health policies.”
(UT Center for Health Communication, 2017)

Health Communication Process Model



Health Comm Scholarship is Growing Rapidly



Publications per year with "health communication" in title or abstract per Google Scholar



Society for Health Communication's Inaugural
"National Health Communication Summit"
May 15, 2017 at the Renaissance Arlington

HCsociety.org

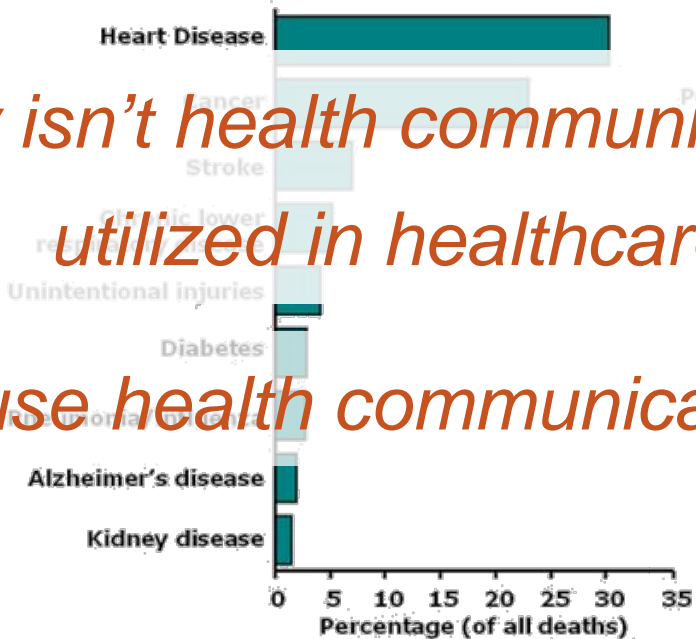
National Health Communication Priorities



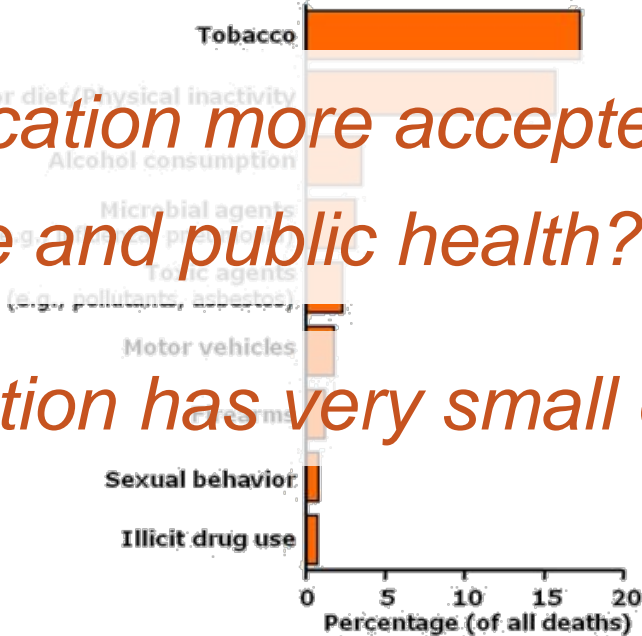
Health Communication and Health Information Technology

- **HC/HIT-1:** Improve the health literacy of the population
- **HC/HIT-2:** Increase the proportion of persons who report that their health care providers have satisfactory communication skills
- **HC/HIT-5:** Increase the proportion of persons who use electronic personal health management tools
- **HC/HIT-9:** Increase the proportion of online health information seekers who report easily accessing health information
- **HC/HIT-12:** Increase the proportion of crisis and emergency risk messages intended to protect the public's health that demonstrate the use of best practices

Leading Causes of Death*
United States, 2000



Actual Causes of Death†
United States, 2000



Why isn't health communication more accepted and utilized in healthcare and public health?

Because health communication has very small effects!



Most “health campaigns” are not designed to be “behavior change” campaigns

A Meta-Analysis of the Effect of Mediated Health Communication Campaigns on Behavior Change in the United States (Snyder et al., J Hlth Com, 2004)

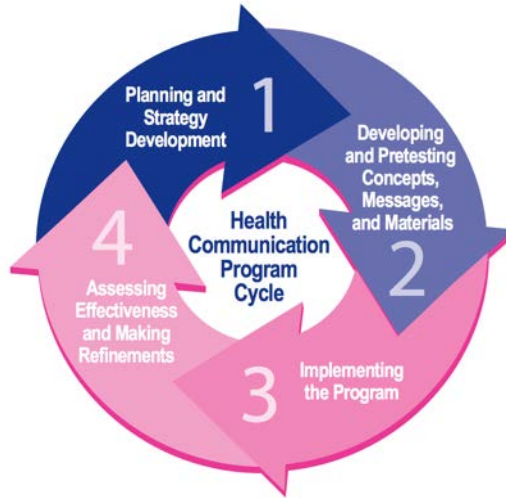
- Reviewed 48 campaigns, total $n=168,362$
- Mediated health campaigns have small short-term effects
 - The average media campaign effect on behavior was $r = .09$, with a 95% confidence interval of .07 to .10.
 - Effects ranged from $r = .04$ for sexual behaviors to $r = .09$ for alcohol use reduction to $r = .15$ for seat belt use
- Campaigns with an enforcement component were more effective
- Conclusion: Given the small campaign effect sizes of previous campaigns, planners should set modest goals for future campaigns

Designing Effective Health Communications: A Meta-Analysis (Keller & Lehmann, JPPM, 2008)

- A meta-analysis of 60 health comm studies involving nearly 22,500 participants
 - Examined the influence of 22 tactics (e.g., fear, framing) and 6 individual characteristics (e.g., age, involvement) on intentions to comply with health recommendations
 - Examined when message tactics interact with individual characteristics to determine intentions
- Found that message tactics have a significant influence on health behavior intentions even after controlling for individual differences
 - Strong effects of case information, social consequences, other referencing, female communicators, detection behaviors
 - Untailored framing and exclusively-emotional appeals are “not advisable”

What Makes an Effective Health Comm Campaign?

- Goals and objectives
- Audience analysis
- Theory and models
- Creative development
- Distribution strategy
- Extensive pretesting
- Implementation
- Analytics and analysis
- Evaluation and revisions



Effect of the first federally-funded US antismoking national media campaign (McAfee *et al.*, Lancet, 2013)

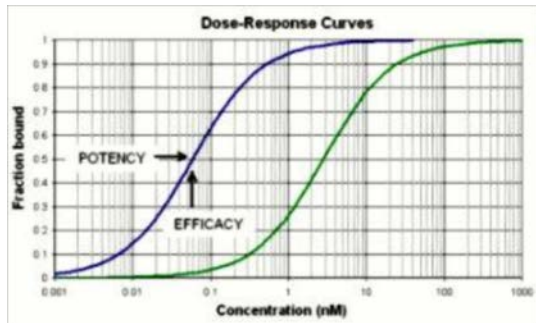
- “Tips from Former Smokers” contained hard-hitting emotionally evocative TV ads
- 3-month campaign cost \$54M
- Quit attempts rose 12% over baseline
- $\cong 1.64\text{M}$ smokers made quit attempts
- $\cong 220\text{K}$ remained abstinent at follow up
- $\cong \$200$ per year of life saved!



Health Communication Campaigns

- Campaigns require sufficient time, resources, and especially expertise to implement correctly and effectively.
- Campaigns that fail to follow the full health communication planning model are more public relations (awareness) than public health (behavior and/or policy change)
- Under-resourced and ineffective health campaigns actually undermine the perceived value of health communication

Health communication interventions and messages have a dose-response effect



- An ideal level of potency is required to achieve efficacy
- Under-dosed or over-dosed treatments have consequences
- Principle applies to individual and population level interventions

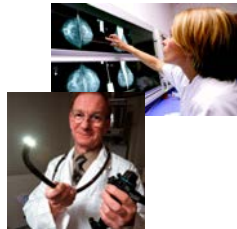
How complex are these behaviors?



BAD THINGS



GOOD THINGS



What “dose” of intervention is needed to have an impact?

What Determines Health Communication Dose? (for Individuals and Populations)

- Exposure level
- Message receptivity
- Message intensity
- Message interactivity
- Habits and/or addictions
- Environmental context

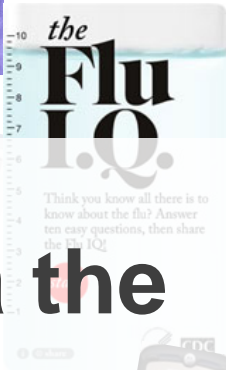
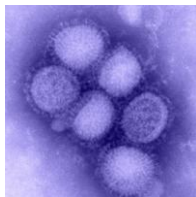


A Meta-Analysis of US Health Campaign Effects on Behavior (Snyder & Hamilton, 2002)

- Exposure had a strong positive correlation with average effect size ($r=.47$, $k=41$, $n=119,580$)
- Therefore, exposure is a necessary but not sufficient condition for change in the target population
- Low exposure leads to low or no effects, and most campaigns (48 reviewed) had very low exposure

Health Communication Dose-Response

- Every health communication intervention and campaign ever conducted to date was probably under-dosed
- Insufficiently dosed campaigns and interventions are a waste of time, money, energy, and effort and are ethically questionable in a time of limited resources
- Insufficiently dosed campaigns actually undermine the perceived value of health communication



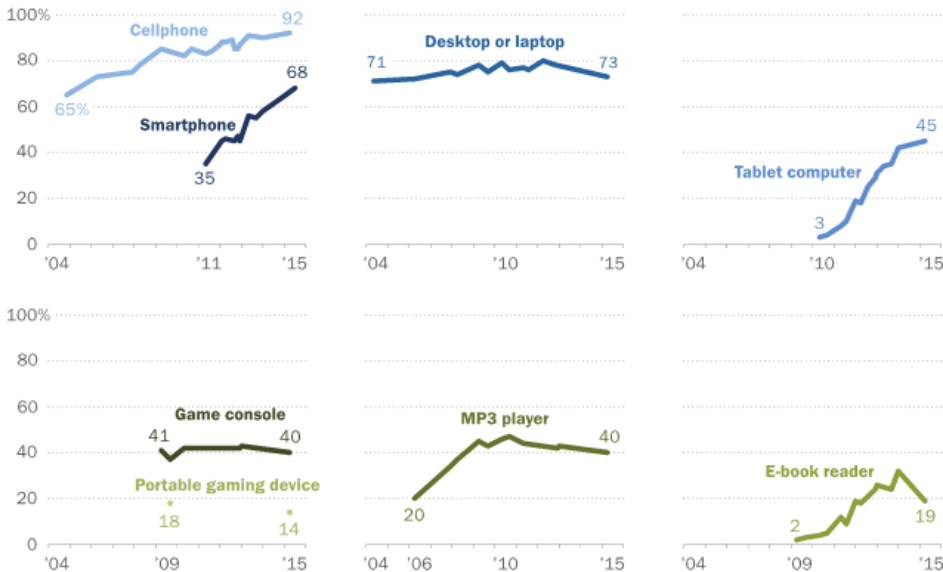
Is digital, social, and mobile media the “game changer” we have been seeking?



Device Ownership (2004-2015)

Smartphones, Tablets Grew in Recent Years; Other Devices Declined or Stayed Flat

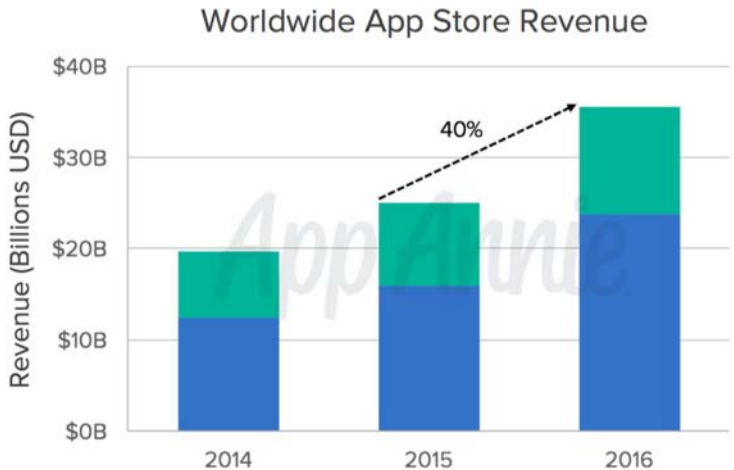
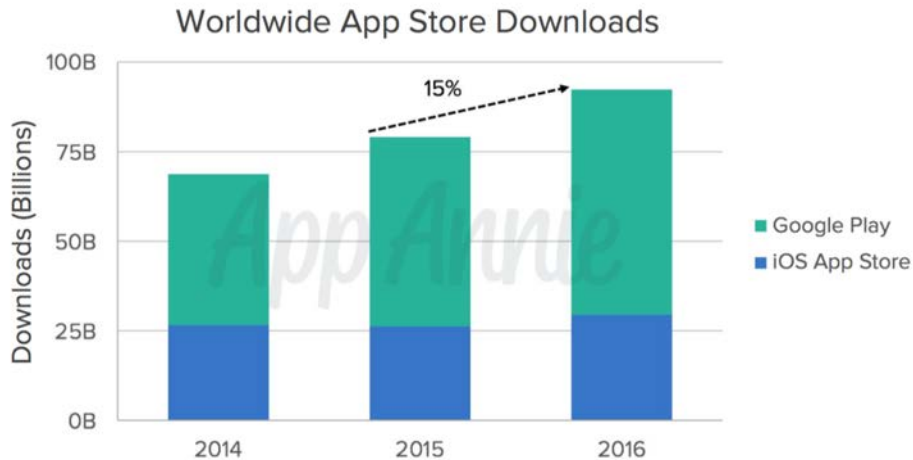
% of U.S. adults who own the following devices



Source: Pew Research Center survey conducted March 17-April 12, 2015. Smartphone data based on Pew Research survey conducted June 10-July 12, 2015. Trend data are from previous Pew Research surveys.

PEW RESEARCH CENTER

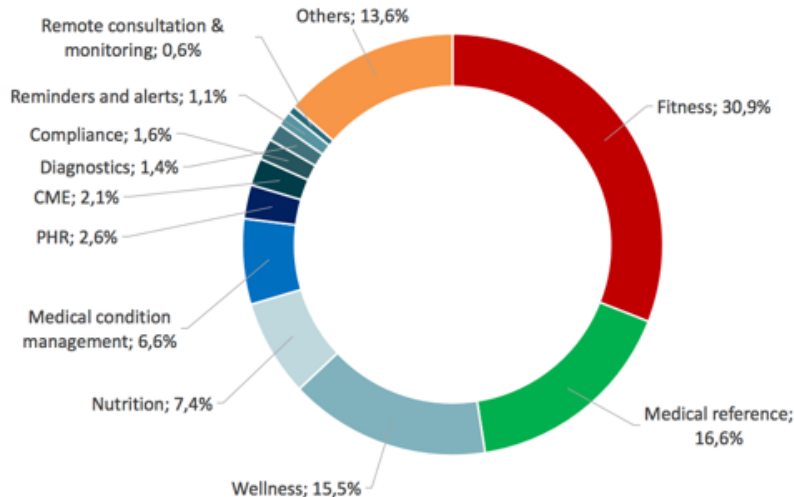
App Downloads and Revenue



<https://techcrunch.com/2017/01/17/app-downloads-up-15-percent-in-2016-revenue-up-40-percent-thanks-to-china/>

Mobile-Based Healthcare (mHealth)

mHealth app category share



Source: research2guidance, 808 apps from Apple App Store, Google Play, BlackBerry App World and Windows Phone Store (March 2014)

- > 165,000 health-related apps
- Potential for growth
- Almost no evidence for efficacy to date

High Quality SMS-based mHealth Programs



 **smokefreeTXT**



BEDSIDER



Head, K.J., et al. (2013) Efficacy of text messaging-based interventions for health promotion: A meta-analysis, *SSM*.

- Overall weighted mean effect size was $d = .329$ ($p < .001$): “small to medium magnitude”
- Smoking cessation and physical activity most effective
- Tailoring and personalization improved outcomes
- Individualized or decreasing message frequency worked better than using a fixed message frequency

Hall, A. K., Cole-Lewis, H. & Bernhardt, J. M. (2015). Mobile text messaging for health: A systematic review of reviews. *ARPH*.

- Reviewed 15 systematic reviews and meta-analyses
 - Explored 89 individual studies using SMS for public health
 - SMS-based interventions were effective for: diabetes, weight loss, physical activity, smoking cessation, medication adherence for ART
 - Limited consistent evidence across studies and reviews to inform recommended intervention characteristics
 - Additional research needed to establish: longer-term intervention effects, best intervention characteristics, cost-effectiveness

Digital and Mobile Health Communication

- More research and evaluation needed, especially on social media and reducing health disparities
- Instead of apps, focus on responsive web design and mobile messaging, especially tailored SMS
- Simplify complex interventions (e.g., tailoring) so effective methods can easily be brought to scale

The Path Forward

Despite challenges, if we focus more on best-practice fidelity, intervention dose, and scaling up what works, the future of health communication will be bright



Thank you, Chuck, for your scholarship, leadership and vision, and for paving the way for all of us to follow.

Thank you GMU & DCHC for your kind support

*Don't forget about the National Health Communication Summit
on May 15th in DC. More information at: [HCsociety.org](https://hcsociety.org)*

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