BIOGRAPHICAL SKETCH

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NAME: Fink, Arlene

eRA COMMONS USER NAME (agency login): astrid4

POSITION TITLE: Professor of Medicine

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing,

include postdoctoral training and residency training if applicable.)

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|---|-----------------|-----------------|----------------|
| INSTITUTION AND LOCATION | DEGREE | Completion Date | FIELD OF STUDY |
| | (if applicable) | MM/YYYY | |
| City College of New York (CCNY), New York | BA | 1965 | History |
| Columbia University, New York | MA | 1971 | History |
| University of California, Los Angeles | PHD | 1975 | Education |

A. Personal Statement

My skills include program evaluation (including comparative effectiveness, implementation, and outcome); surveys and survey research; medical and patient education; and health care technology especially for older adults. I am the author of over 135 peer-reviewed publications. My articles and textbooks have been translated into Chinese and French. My complete bibliography can be found at:

http://www.ncbi.nlm.nih.gov/sites/myncbi/arlene.fink.1/bibliography/9776561/public/?sort=date&direction=ascending

B. Positions and Honors

Positions and Employment

1988 - President, Arlene Fink Associates

1996 - Adj. Professor of Medicine, David Geffen School of Medicine, UCLA
1996 - Adj. Professor of Public Health, Fielding School of Public Health, UCLA

Other Experience and Professional Memberships

<u>Honors</u>

| 1999 | Faculty Advisor, UCLA-NIMH Center for Health Services Research |
|------|--|
| 2000 | Pfizer Award in Health Literacy, Pfizer, Inc. |
| 2003 | Evaluation Director, UCLA IMPACT Prostate Cancer Treatment Program |
| 2005 | Advisor, Institut de Promotion de la Prevention Secondaire en Addictogie |
| 2009 | Senior Academic Advisor, UCLA Gambling Studies Program |
| 2010 | Research Advisor, UCLA Department of Urology Health Services Research Center |

C. Contribution to Science

1. INSTRUMENTAL IN ADAPTING SURVEY RESEARCH METHODS FROM POLLING TO THE MEASUREMENT OF HEALTH STATES AND PREFERENCES.

In 1987, I was asked to write a textbook on how to design and conduct surveys. The publisher (Sage) organized a group of experts to review my book proposal. The reviews were scathing because, at that time, surveys were considered to be valuable primarily for polling probability samples of people about their views on presidential elections or consumer goods. But I saw surveys differently. In my view, surveys were data collection methods in which people not only could provide their opinions (e.g., patient satisfaction

surveys) but could also offer perspectives on their physical, spiritual, and mental health. This meant that new methods needed to be devised to determine the accuracy of the responses because they were being collected for new purposes. I was part of several interdisciplinary teams that devised and validated these methods so that now, health surveys are ubiquitous. The book I wrote for Sage has become a standard in the field. It views surveys in a larger context in which investigators consider the research design and data analysis strategies as the same time as they develop questions, response categories, and questionnaire type (in-person interview; online). The book is in its sixth edition, and has been translated into Chinese.

Surveys and survey research are more than just academic concepts to me. In the 1970's, I was part of a UCLA and Harvard Team that developed the Functional Status Questionnaire (FSQ). This was one of the first measures of its type because until that time, clinical measures focused on measurable processes and outcomes such as blood pressure or diabetes control and did not consider variables such as quality of life and functional status. Building upon that work, I was also part of the three-person team that developed the UCLA Prostate Canter Index, which was designed to measure prostate cancer quality of life. Both the FSQ and The Prostate Cancer Index have been translated into other languages, are still in use today, and have served as models throughout the health and disease spectrum for the development of patient-oriented health surveys. Perhaps the most important survey that I have developed is the Alcohol-Related Problems Survey (ARPS), which relies on algorithms to identify whether an older person's drinking is nonhazardous, hazardous or harmful (WHO categories). The algorithms are dependent on quantity and frequency of drinking alone and in combination with data on health, medication-use and functional status. The ARPS has been used with thousands of patients in the U.S. and abroad in clinical and research settings.

- a. Fink A. How to Conduct Surveys. Sixth ed. London, Thousand Oaks, New Delhi, Singapore: Sage; 2015. 200p.
- b. Fink A. Alcohol-Related Problems Survey. [Internet]. 2015 January.
- c. Litwin MS, Hays RD, Fink A, Ganz PA, Leake B, Leach GE, Brook RH. Quality-of-life outcomes in men treated for localized prostate cancer. JAMA. 1995 Jan 11;273(2):129-35. PubMed PMID: 7799493.
- d. Jette AM, Davies AR, Cleary PD, Calkins DR, Rubenstein LV, Fink A, Kosecoff J, Young RT, Brook RH, Delbanco TL. The Functional Status Questionnaire: reliability and validity when used in primary care. J Gen Intern Med. 1986 May-Jun;1(3):143-9. PubMed PMID: 3772582.
- 2. CREATED FIRST COMPREHENSIVE ONLINE ALCOHOL SCREENING AND EDUCATION SYSTEM FOR OLDER ADULTS.

A 1999 JAMA study reported that, for older adults, hospital admissions were greater for alcohol-related diagnoses than for myocardial infarction. A subsequent literature review that I directed[a] revealed that little was known about how to detect alcohol problems in older adults and then deliver appropriate care. Without this information, it was almost impossible to understand why alcohol-related diagnoses were so prevalent in older adults. We now know that about half of all older adults drink alcohol, and that about 15% drink above FDA or NIH guidelines. In older adults, alcohol at any consumption level may pose risks depending upon their health, medication use and functional status. According to the CDC, more older adults bingedrink than do their younger counterparts, leading to excess injury and even death. Drinking among older people is becoming a public health problem because of the increase in the proportion of older people. Thus, even if the drinking frequency remains unaltered, the absolute number of older adults with risks is likely to increase. Although physicians recognize the importance of screening and intervention, studies show that most alcohol examinations are perfunctory. In the case of older patients, moreover, physicians only have recourse to measures and treatments that have been developed for younger people, particularly those who drink heavily. In response to this growing public health problem, I have served as the PI on several NIH grants that developed and validated an alcohol screening and education program that targets older people. I have been responsible for the creation of the Alcohol-Related Problems Survey or ARPS (wisedrinking.org), a screening measure, [c,d] and A Toast to Health in Later Life (wiserdrinking.org), patient education. Since its development in the 1990's, the ARPS and its derivatives have been used with thousands of older adults in community and research settings in the US and abroad (e.g., France, Australia, New Zealand) to study alcohol's use and risks in older adults. The ARPS system (screening and education) is still the only one available that is specifically designed for older adults. In the ARPS, risks are

determined algorithmically by taking into account alcohol consumption on its own or in combination with each person's health, medication use, and functional status.

- a. Wilson SR, Knowles SB, Huang Q, Fink A. The prevalence of harmful and hazardous alcohol consumption in older U.S. adults: data from the 2005-2008 National Health and Nutrition Examination Survey (NHANES). J Gen Intern Med. 2014 Feb;29(2):312-9. PubMed PMID: <u>24101531</u>; PubMed Central PMCID: <u>PMC3912311</u>.
- b. Fink A, Elliott MN, Tsai M, Beck JC. An evaluation of an intervention to assist primary care physicians in screening and educating older patients who use alcohol. J Am Geriatr Soc. 2005 Nov;53(11):1937-43. PubMed PMID: 16274375.
- c. Fink A, Tsai MC, Hays RD, Moore AA, Morton SC, Spritzer K, Beck JC. Comparing the alcohol-related problems survey (ARPS) to traditional alcohol screening measures in elderly outpatients. Arch Gerontol Geriatr. 2002 Feb;34(1):55-78. PubMed PMID: 14764311.
- d. Fink A, Hays RD, Moore AA, Beck JC. Alcohol-related problems in older persons. Determinants, consequences, and screening. Arch Intern Med. 1996 Jun 10;156(11):1150-6. PubMed PMID: 8639009.

3. DEVELOPED RAND/UCLA APPROPRIATENESS METHOD (RUAM).

The RUAM, which has become a leading paradigm for quality assessment in medicine, is a mechanism for reaching formal agreement about how science should be interpreted in the real world. It makes it possible to set rules for determining best practices-guidelines that, when implemented, increase the value of health care dollars spent because they increase the probability that the care delivered will contribute to improved health of the population.

The RUAM was originally developed to determine the appropriateness of medical and surgical procedures when supporting clinical evidence was unavailable or ambiguous. Over time, the RUAM's use has been expanded so that it can be applied to the preparation of quality of care indicators. I was instrumental in creating both the original and enhanced methods. Since its development and validation, the RUAM has been used thousands of times in fields as varied as surgery, transfusion medicinel cardiology and geriatrics and in countries as diverse as the UK, Spain, and Italy, Hungary, and Japan. The RUAM relies on bringing together expert panels in a two-round modified Delphi process to rate the appropriateness of a procedure (e.g., cholecystectomy) using a 9-point rating scale. The second step is to calculate the extent to which the panelists agree, disagree, or are uncertain about the procedure's appropriateness given selected scenarios. My role in developing the RUAM was threefold: 1) develop the methods for bringing the experts together; 2) identify the methods and format for the panel's literature review or evidence base; and 3) create the statistical basis for defining disagreement, agreement, and uncertainty. As part of my effort to determine how many experts to include and the number and characteristics of a panel that would produce clinically useful and reliable results, I searched the communications, medical management, and education literature. I concluded that an effective panel should be limited to between 9 and 15 members who were known to be experts in diverse fields. The RUAM requires a literature review synthesis, the second of my two contributions to the RUAM. I was instrumental in helping to create a simple process to summarize the literature, and perhaps most importantly, to devise a method to separate the high quality studies (relatively unbiased) from the low. At the time, standard criteria for selecting high quality studies did not exist.

Based on the RUAM literature review methods, I wrote one of the first texts on how to do a literature review (as well on how to evaluate the literature's quality). This book is in its 3rd edition and has been used widely in the US, Australia, the United Kingdom, and Japan. Also, I was a key partner in developing the RUAM's methodology and was instrumental in creating the procedures for coming to agreement on appropriateness and quality. Originally, we focused on disagreement: if panelists did not agree, they disagreed. I introduced the concept of uncertainty as a way of indicating that it was the lack of information, rather than biases due to clinical experience, preference, or research knowledge that produced ambiguity over a finding.

a. Fink A. Conducting Research Literature Reviews. Fourth ed. London, Thousand Oaks, New Delhi, Singapore: Sage; 2014. 257p.

- b. Fink A, Siu AL, Brook RH, Park RE, Solomon DH. Assuring the quality of health care for older persons. An expert panel's priorities. JAMA. 1987 Oct 9;258(14):1905-8. PubMed PMID: 3656600.
- c. Merrick NJ, Fink A, Park RE, Brook RH, Kosecoff J, Chassin MR, Solomon DH. Derivation of clinical indications for carotid endarterectomy by an expert panel. Am J Public Health. 1987 Feb;77(2):187-90. PubMed PMID: 3799858; PubMed Central PMCID: PMC1646850.
- d. Fink A, Kosecoff J, Chassin M, Brook RH. Consensus methods: characteristics and guidelines for use. Am J Public Health. 1984 Sep;74(9):979-83. PubMed PMID: <u>6380323</u>; PubMed Central PMCID: <u>PMC1651783</u>.

4. PIONEERED PROGRAM EVALUATION RESEARCH IN HEALTH AND MEDICINE

I was among the first health researchers to develop and describe methods for evaluating the effectiveness, quality, and value of public health and medical interventions, programs and policies. When I began my career in 1975, evaluations were controversial, with many medical scientists and clinicians regarding them as unnecessary and wasteful. These individuals questioned the practicality and merits of conducting valid evaluations of program and policy outcomes and value, asserting that many important concepts (e.g., health-related quality of life) were difficult to measure and subject to influences beyond the system's control (e.g., patient adherence to drug regimens). In the 1970's, I wrote seminal articles and books that contradicted these ideas and advocated adapting methods commonly used in epidemiology, economics, and clinical research. It was my view that these fields offered research designs and statistical techniques that would enable health scientists to design studies that could produce unbiased findings about a program's effectiveness, quality and value. Over time, these originally innovative and controversial views have become mainstream, and now, all new programs and policies that apply for funding must be accompanied by rigorous evaluations using a mixture of clinical and social science methods.

I have written several books on evaluation methods in the health and medical sciences, some of which have been translated into Chinese, and all of which have been in continuous publication since the 1980's. These books have been used throughout the world, by tens of thousands of students. In addition to books on evaluation theory and research, I have led or have been involved in at least 20 national and international evaluations, some of which have not only provided information about program effectiveness or quality, but have also produced new knowledge about health care outcomes such as quality of life and functional status. Among my earliest evaluation studies was an investigation into the effectiveness of a new way of delivering primary care in teaching hospitals. Other evaluation efforts have included California's IMPACT program, which delivers treatment for prostate cancer to low-income patients. While doing these studies, I have been responsible for training and mentoring over a hundred Fellows in evaluation studies. These Fellows have come from public health, internal medicine, family medicine, emergency medicine, women's health, urology, pediatrics, geriatrics, general surgery, and psychiatry. Many have achieved major leadership roles in positions such as Surgeon General, Division Chief (medicine and surgery), and State Commissioner of Health.

- a. Fink A. Evaluation Fundamentals. Third ed. London, Thousand Oaks, New Delhi, Singapore: Sage; 2015. 285p.
- b. Chamie K, Connor SE, Maliski SL, Fink A, Kwan L, Litwin MS. Prostate cancer survivorship: lessons from caring for the uninsured. Urol Oncol. 2012 Jan-Feb;30(1):102-8. PubMed PMID: <u>22127017</u>; PubMed Central PMCID: <u>PMC3259185</u>.
- c. Kosecoff J, Brook RH, Fink A, Kamberg C, Roth CP, Goldberg GA, Linn LS, Clark VA, Newhouse JP, Delbanco TL. Providing primary general medical care in university hospitals: efficiency and cost. Ann Intern Med. 1987 Sep;107(3):399-405. PubMed PMID: 3619226.
- d. Satcher D, Kosecoff J, Fink A. Results of a needs assessment strategy in developing a family practice program in an inner-city community. J Fam Pract. 1980 May;10(5):871-9. PubMed PMID: 7391766.