MEDINFO 2007
HISA Ltd Australia
© 2007 The authors. All rights reserved.

Social Construction of the Patient Through Problems of Safety, Uninsurance, and Unequal Treatment, a Discourse Analysis of IOM Executive Summaries

Lisa J. Trigg

School of Nursing; Biomedical & Health Informatics, School of Medicine University of Washington Seattle, WA

Abstract

This is a second preliminary report from a larger research project. The purpose of the larger research project is to study how the Institute of Medicine discourse promoting the health information technology may reproduce existing social inequality in healthcare. Subject position is a concept from critical theory which is used to study social justice through such approaches as discourse analysis. Social constructionist and critical discourse analysis combined with corpus linguistics methods has been used in methods testing to study the subject positions constructed for receivers of health care across the executive summaries of three different Institute of Medicine reports. Preliminary data analysis revealed differences in the way receivers of health care are constructed in the three texts selected for this study.

Keywords:

corpus linguistics, critical theory, discourse analysis, health information technology, social constructionism, inequality, social justice

Introduction

The 2003 American Medical Informatics Association Spring Congress outlined a social justice agenda for health informatics by calling for the development of health information technologies (HIT) that bridge the digital divide and support improved health care outcomes for both vulnerable and underserved populations. The white paper reporting on this Congress outlined barriers for HIT development for vulnerable and underserved populations and offered policy, funding, research, and education and training recommendations to overcome these barriers.(Chang et al., 2004)."

This is the second report from a study of how the Institute of Medicine (IOM) discourse promoting the deployment of health information technology and the development of the proposed National Health Information Infrastructure (NHII) may reproduce social inequality in health care. This research is in progress using critical discourse analysis of two Institute of Medicine report series: the Quality Chasm, and the Insuring Health series, as well as the standalone report on the unequal treatment of racialized populations, Unequal Treatment (Institute of Medicine & Board on Health Care Services, 2005; Institute of Medicine & Committee on the Consequences of Uninsurance, 2004; Smedley, Stith, Nelson, Institute of Medicine, & Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, 2003). The overarching goal of this research is to examine these texts for their contribution to the social justice agenda outlined by the 2003 AMIA Spring Congress using a study of the construction of subject positions in the textual data.

Methods

Data. A detailed description of the data selection for this research was outlined in the first preliminary report (Trigg, 2006). Briefly, each of the reports was published by the IOM between 2000 and 2005. To Err is Human of the Quality Chasm series was selected for its strong recommendations for HIT in the interest of improving health care safety and quality (Institute of Medicine et al., 2005) Coverage Matters, from the Insuring Health series (Institute of Medicine et al., 2004) and the standalone report Unequal Treatment (Smedley et al., 2003) were selected because they outline specific social justice problems in United States health care—those associated with uninsurance and the unequal treatment of racialized populations (racialized populations are persons grouped together solely based on the construct of 'race'). The executive summaries were selected for the preliminary data analysis in order to limit the scope of the project for methods testing.

Data Management & Processing. All texts were purchased from the National Academies Press (National Academy of Sciences, 2006) in both paper book and digital .PDF formats to facilitate comparison of surface features of all texts and random checking of agreement between the text versions. Data was cleaned using ConvertDoc™ (Softinterface, 2006) in preparation for analysis using corpus linguistics computer analysis tools. Oxford WordSmith™ Tools 4.0 (Scott & Oxford University Press, 2006) was used initially to create KWIC concordances for the three separate executive summaries for the truncated keyword patient*. Subsequent keyword concordances for the words person* and consumer* were created based on analysis of the results of the initial patient* concordances.

Results

In this section only, Coverage Matters = CM, To Err is Human = TEH, and Unequal Treatment = UT. Table 1 shows the results of the KWIC searches and includes number of tokens in executive summary.

The most notable result of the keyword in context concordancing was the small number of times that the word patient* is used in CM, compared with the number of times it is used in the other two texts.

Table 1 - Word Frequencies

KWIC	CM	TEH	UT
Patient*	2	81	129
Person*	27	2	3
Consumer*	3	7	1
Total word tokens	4764	5139	7729

*Table 1 - This table shows the number of times each truncated keyword appears in each text according to the KWIC concordance. Each line represents a set of concordances. The words person, patient, and consumer are all used to refer to receivers of health care in these executive summaries. Each carries a somewhat different connotation. * = truncation*

The sentence from CM quoted in the last paragraph actually distinguishes between "uninsured persons" and "patients with coverage," reporting that uninsured persons often pay more for medical care than patients with coverage. This distinction is curious and contradictory, given that if "uninsured persons" are "paying more than others for medical care," they must at some time have also been "patients."

Discussion

Exploration of definitions of these words yields interesting distinctions of meaning and therefore social action through language. One of the top current definitions for "person" in the Oxford English Dictionary Online™ (Simpson, 2006) (OED) is "an individual human being." A top OED definition for the word "patient" is "a person receiving or registered to receive medical care." Earlier and currently archaic OED definitions for the word "patient" are "a sufferer" and "a person who suffers from injury or disease." OED defines a "consumer" as "he who or that which consumes, wastes, squanders or destroys." OED definitions of "consume" include "to make away with, use up destructively," "to destroy," "to decompose," and "to spend, especially wastefully, to waste, to squander." American Heritage™ provides another definition for "consumer" as "someone who purchases a good for personal use" (Trefil, Kett, & Hirsch, 2006). Each variation suggests different requirements of an information system.

Given the limited corpora used in this study, little can be made of this distinction. However if this distinction between uninsured persons and patients pervades the Insuring Health texts, and enters the policy level requirements specification for the NHII, the needs of receivers of health care who are uninsured may not be adequately represented in a NHII which is designed for "patient safety."

Conclusion

The combination of critical and social constructionist discourse analysis with corpus linguistics methods has proven to be adequate for investigating textual data for discursive signs of the social action of language in creating subject positions in the selected IOM report executive summaries. It should prove useful in the larger study, which will use a much larger corpus, and make a closer interrogation of the textual data. The automation of corpus linguistics methods doesn't replace human interpretation in discourse analysis, but provides systematic ways to find language use patterns of interest to this research.

References

[1] Chang, B. L., Bakken, S., Brown, S. S., Houston, T. K., Kreps, G. L., Kukafka, R. et al. (2004). Bridging the Digital Divide: Reaching Vulnerable Populations. Journal of the American Medical Informatics Association, 11:6 448-457.

[2] Institute of Medicine and Board on Health Care Services (2005). Crossing the Quality Chasm: The IOM Health Care Quality Initiative. Institute of Medicine [On-line]. Available: http://www.iom.edu/CMS/8089.aspx Retrieved: 2-22-2006

[3] Institute of Medicine and Committee on the Consequences of Uninsurance (2004). Consequences of Uninsurance Project. Institute of Medicine [On-line]. Available: http://www.iom.edu/project.asp?id=4660 Retrieved: 2-22-2006

[4] Smedley, B. D., Stith, A. Y., Nelson, A. R., Institute of Medicine, & Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care (2003). Unequal treatment confronting racial and ethnic disparities in health care. Washington, D.C: National Academy Press.

[5] Trigg, L. J. (2006). Reproducing social inequality in the National Health Information Infrastructure, a discourse analysis. In Seoul, Korea: 9th International Congress of Nursing Informatics.

[6] National Academy of Sciences (2006). About the National Academies Press. National Academies Press [On-line]. Available: www.nap.edu Retrieved: 2-22-2006

[7] Softinterface, Inc. (2006). ConvertDoc. Softinterface, Inc. [On-line]. Available: http://www.softinterface.com/Convert-Doc/Convert-Doc.htm Retrieved: 2-22-2006

[8] Scott, Mike and Oxford University Press (2006). Oxford WordSmith Tools 4.0. Oxford University Press [On-line].

Available: http://www.lexically.net/wordsmith/index.html Retrieved: 2-22-2006

[9] Simpson, John (2006). Oxford English Dictionary Online. Oxford University Press [On-line]. Available: http://dictionary.oed.com.offcampus.lib.washington.edu/

[10] Trefil, James, Kett, Joseph, and Hirsch, E. D. (2006). The American Heritage® New Dictionary of Cultural Literacy, Third Edition. www.dictionary.com [On-line]. Available: www.dictionary.com Retrieved: 12-4-2006

Acknowledgements

Many thanks to the NLM training grant # 5 T15 LM07442, Gail Stygall, Carole Schroeder, David Allen, Sherrilynne Fuller.

Adress for correspondence

Lisa Trigg
Email: triggr@gmail.com