TITLE: Readability of diabetes materials

AUTHORS: Trevor Sharpe

FACULTY SPONSOR: Sara Weigle, Ph.D, Professor, Applied Linguistics & ESL

INTRODUCTION: My poster will present results of an analysis that is related to a funded project in which we are attempting to identify and reduce the linguistic barriers that limited-English proficient (LEP) diabetes patients encounter in oral and written interactions related to health-care. Health care providers often give patients written materials to help them manage their illness. However certain materials can be difficult to comprehend, particularly among the Limited English proficient (LEP) population. Diabetes patients must stay abreast with the trends and information given to them by doctors but can be difficult if that information is indecipherable.

OBJECTIVES:
The goals of the study are to quantify differences in readability of written materials produced by diabetes educators as opposed to materials produced commercially (i.e., by pharmaceutical companies).

METHOD:
A sample of 32 documents total was collected which included 20 documents written by the National Diabetes Education Program and 12 documents written by pharmaceutical companies. The data was analyzed using the Vocab Profiler: The Complete Lexical Tutor (Cobb, 2008), taking the first 300 words of each text. For each text, the type-token ratios (i.e., the proportion of different words to total words) were calculated as well as the percentage of words from the 1000 most commonly used words and the 2nd list of 1000 most commonly used words. The percentages of academic words used and highly infrequent words were also calculated.

RESULTS: A preliminary analysis suggests that materials written by educators used more common words, were less lexically dense, and used fewer academic words than commercially produced materials. This makes these documents easier to read, particularly by LEP or low-literacy patients.

CONCLUSION: For patients to benefit from written materials, these materials need to be written in language that is easily understood. The implications of the study for the preparation of health-related materials will be discussed.

Reference: