This narrative synthesis addresses an important issue in the care of patients with chronic disease i.e. their ability to understand and use health-related information as it relates to lifestyle issues that may impact the control of their illness.

The authors sought to evaluate the effectiveness of primary health providers in developing health literacy of patients to make changes in smoking, nutrition, alcohol, physical activity, and weight-related (SNAPW) behaviors.

The authors searched the relevant databases for articles related to health literacy using search terms as defined in Table 1 from 1985-2009 and selected studies published in English which included males and females ages 18 and over with at least 1 SNAPW risk factor, and interventions implemented in primary care. A hand search was conducted for 4 key journals.

Health literacy was defined as functional, communicative, and critical for this review.

The authors included 52 papers in their review describing interventions to address health literacy as well as lifestyle risk factor modification, delivered by health professionals of varied backgrounds and training. An improvement in health literacy, as defined by the authors, was noted in 71% of the studies reviewed.

The intensity of the interventions delivered was lower for doctors compared to those delivered by dieticians, nurses, educators, and multidisciplinary teams. Intensity was defined as hours or points of contact between providers and patients.

Barriers and drivers related to ability to provide SNAPW literacy interventions included provider context, provider cost, and interactions between providers and patients.

General Comments

The authors appropriately define the significance of poor literacy skills on health and the importance of addressing the SNAPW risk factors as part of chronic disease management. However, I found it difficult to make valid conclusions based upon a synthesis of very different types of studies, and I found it confusing to include outcomes related to self-efficacy and motivation as measures of health literacy. The authors do recognize this limitation starting in paragraph 6 of the Discussion section.
The conclusion that suggests that non-physician providers are effective in helping patients with chronic disease management is an important one. This model of care delivery for chronic disease is being utilized in many primary care settings at least in the United States. However, it is not clear from this review if this difference is related only to intensity of contact as measured by time or number of points of contact. Again, it is also difficult to interpret this finding as the type of intervention varied across the small numbers of studies and may be different in ways not only related to time or number of points of contact. It is also not clear which members of the multidisciplinary teams led the interventions in those particular studies.

Major Compulsory Revisions

1. I had difficulty understanding the choice to define the “outcome measure associated with health literacy” as noted in the Methods section in the paragraph after #5 of key definitions. The concepts of self-efficacy, motivation and patient activation are not always a measure of health literacy- as the term “health literacy” is most commonly used in the reported literature- although performing poorly in one of these domains may clearly be associated with low health literacy. Although the authors do acknowledge the need to broaden their measure of health literacy in the last paragraph of the discussion section, it may make use of this term confusing for many readers. Please consider using a term such as “self-management skills,” where the traditional definition of health literacy represents one component of this skill-set.

2. The types of studies reviewed were varied, making synthesis of the findings extremely challenging. Importantly, each of the lifestyle changes addressed in the SNAPW definition may require different types of interventions. It would be helpful to separate the SNAPW components and more clearly discuss which type of intervention may be helpful for each issue- as the authors begin to address in paragraph 5 of the Discussion section.

3. In the section “Findings” in the abstract, please clarify the sentence that “Non medical health care providers were more effective …(than whom?) in improving health literacy.” Is this statement really an accurate conclusion given the confounding by intensity of intervention and inability to fully define each intervention?

Minor Essential Revisions

1. It would be helpful if the authors would define the abbreviation SNAPW the first time it appears in the abstract.

2. Please consider using the term “patients” instead of “consumers” with consistency in the paper.

3. Please clarify the dates for initial study selection: January 1, 1985- April or June? of 2009.

4. The nature of the health screening programs referred to in the Discussion section, paragraph #4 should be briefly explained for readers unfamiliar with these programs.
**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests.