

## Fact 1: Use of communication plans with treatment plans can promote common language approaches for building a framework for chiropractic health literacy.

### Introduction:

Chiropractors who implement evidence-based treatment plans with their patients can boost biopsychosocial outcomes for health. Chiropractors who also implement evidence-based communication plans can help patients to practice self care through interactive health literacy.

**Goal:** We advance a framework for Chiropractic Health Literacy (HLC) on a national and international level by using studies adapted from Nutbeam (2000), Coleman et al. (2013 & 2017), and Karuranga et al. (2017).

Three types of health literacy contribute to: 1) how patients may interpret their physical signs and symptoms, 2) navigate, communicate, and participate in treatment decision-making, & 3) get access to equitable care. We summarize the clinical importance of chiropractic health literacy through two identified problems with possible solutions:

### Problem 1:

Chiropractic care can be complicated for patients because of its specialized terminology for treatment plans, symptom trajectories, and potential for benign adverse events.

### Solution 1:

Chiropractors need to adopt functional health literacy, interactive health literacy, and critical health literacy into patient-centered chiropractic care. Health literacy empowers patients of all backgrounds to “read” and “listen” to their bodies, verbally communicate their thoughts and needs during the chiropractic visit, and access print and digital technologies to optimize their health outcomes.

## What are the three types of health literacy?

Updated Definition by Ubbes & Ausherman (2019)	Updated Definition by Ubbes & Ausherman (2019)	Updated Definition by Ubbes & Ausherman (2019)
<b>Functional Health Literacy</b> is the ability to read, write, and speak about health.	<b>Interactive Health Literacy</b> is interpersonal communication between people, including their interactive use of print and electronic materials for health enhancement.	<b>Critical Health Literacy</b> addresses issues of “access and equity” for health information and services. This process includes critical problem posing with creative solutions to empower people who have a variety of backgrounds, health needs, and interests.
Nutbeam’s Definition for Health Literacy	Nutbeam’s Definition for Health Literacy	Nutbeam’s Definition for Health Literacy
<b>Functional Health Literacy:</b> communication of information	<b>Interactive Health Literacy:</b> development of personal skills	<b>Critical Health Literacy:</b> personal and community empowerment
Nutbeam’s Definition for Literacy (2000)	Nutbeam’s Definition for Literacy (2000)	Nutbeam’s Definition for Literacy (2000)
<b>Basic or Functional Literacy</b> —sufficient basic skills in reading and writing to be able to function effectively in everyday situations.	<b>Communicative or Interactive Literacy</b> —more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday activities, to extract information and derive meaning from different forms of communication, and to apply new information to changing circumstances.	<b>Critical Literacy</b> —more advanced cognitive skills which, together with social skills, can be applied to critically analyze information, and to use this information to exert greater control over life events and situations.

### References

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Tzoc, E. & Ubbes, V.A. (2017). The Digital Literacy Partnership Website: Promoting interdisciplinary scholarship between faculty, students, and librarians. *New Review of Academic Librarianship*, <https://doi.org/10.1080/13614533.2017.1333013>

Ubbes, V.A. & Ausherman, J.A. (2019). A historical interpretation of how 19th and 20th century books contributed an early language and vocabulary for health literacy. *The Health Educator*, 51(1).

## Fact 2: Use of a health literacy approach will help chiropractors interact with their patients and other health care professionals.

### Summary:

Based upon several U.S. and international consensus studies (2017), we advocate for chiropractors and D.C. students to use, implement, and practice health literacy competencies developed by Coleman et al. (2013 & 2017).

We propose the adoption of a Health Literacy Curriculum (HLC) for chiropractors, because other health and medical professionals are adopting these competencies.

Implementation of a Health Literacy Curriculum (HLC) can improve the Health Literacy Practices (HLP) of chiropractors during doctor-patient interactions and boost the professional curriculum of D.C. students.

## What should a chiropractor know and be able to do...?

1. Routinely use a “teach back” or “show me” technique with patients to check for understanding and correct misunderstandings, during the clinical visit and during the informed consent process:
  - 1.1 Patients are asked to demonstrate their level of understanding by repeating back in their own words the information the professional has communicated to them.
2. Consistently avoid using medical “jargon” in oral and written communication with patients, and define unavoidable jargon in lay terms:
  - 2.1 Define terms like joint dysfunction, joint subluxation, adjustments.
3. Consistently elicit questions from patients through a “patient-centered” approach:
  - 3.1 Ask “what questions do you have?”, rather than “do you have any questions?”
4. Consistently use a “universal precautions” approach in oral communication and written communication with patients:
  - 4.1 Assume that everyone may have difficulty understanding.
  - 4.2 Create an environment where all patients can thrive.
5. Routinely recommend the use of professional health interpreter services for patients whose preferred language is other than English:
  - 5.1 Consistently negotiate a mutual agenda with patients at the outset of a visit.
  - 5.2 Routinely cover a few “need-to-know” or “need-to-do” concepts during a visit.
  - 5.3 Consistently ask for a list of patient concerns at the outset of a patient visit.

### Problem 2:

Unfortunately, there are significant gaps in our understanding of the social determinants of health, such as health literacy as applied to chiropractic.

Evidence is emerging that health literacy can significantly affect health outcomes, access to healthcare services, practice of preventive health behaviors, disease management, and healthcare expenditures. Few chiropractors are introduced to health literacy during schooling.

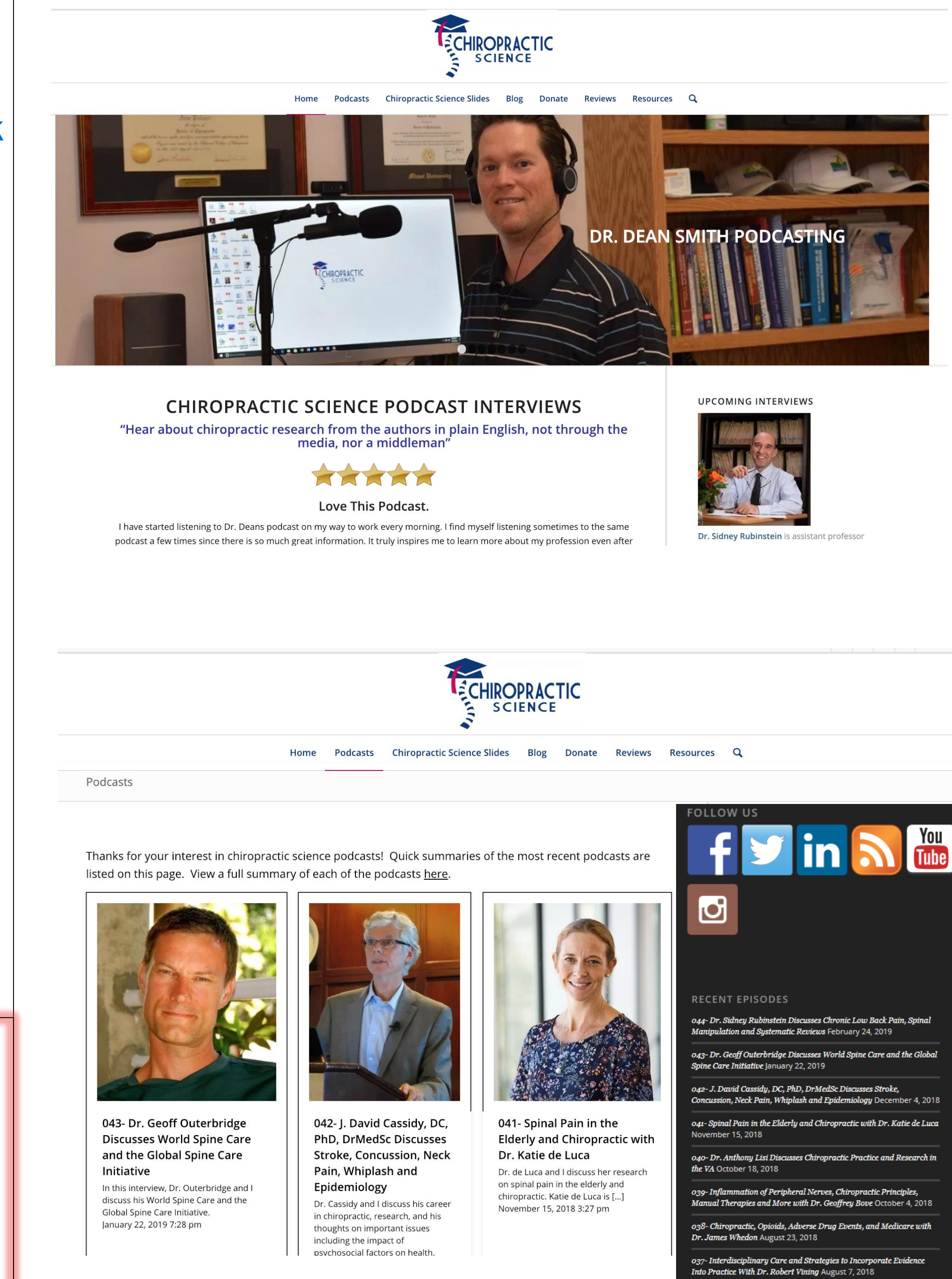
### Solution 2:

Chiropractors need to learn about health literacy as a social determinant of health during professional preparation courses and workshops, so that chiropractors will be able to integrate Health Literacy Practices (HLP) into patient-centered chiropractic care and to write evidence-based journal articles to promote chiropractic health literacy.

## Fact 3: Chiropractic Science podcasts use a health literacy outreach for the professional development of chiropractors.

### Methods:

Chiropractic Science podcasts use a health literacy outreach for the professional development of chiropractors. The 44 evidence-based science podcasts involve health literacy. Peer-review journal articles are written by top chiropractors who are then interviewed by Dean Smith, DC, PhD to demonstrate interactive health literacy. The digital interviews translate the science from written to oral language in an interactive way, which affords learning opportunities for a wider audience of chiropractors who can advance the field of chiropractic practice based on the science. Ultimately, the aim is to promote patient-centered care and boost doctor-patient communication through a HLC.



The screenshot displays the Chiropractic Science Podcasts website. At the top, there is a navigation menu with links for Home, Podcasts, Chiropractic Science Slides, Blog, Donate, Reviews, and Resources. Below the menu is a featured image of Dr. Dean Smith with the text 'DR. DEAN SMITH PODCASTING'. The main content area is titled 'CHIROPRACTIC SCIENCE PODCAST INTERVIEWS' and includes a quote: "Hear about chiropractic research from the authors in plain English, not through the media, nor a middleman". There are five stars and the text 'Love This Podcast.' Below this, a testimonial from Dr. Sidney Rubenstein is shown. The 'UPCOMING INTERVIEWS' section features a small image of Dr. Sidney Rubenstein. The bottom section, titled 'Podcasts', lists several recent episodes with their titles and dates, such as '043- Dr. Geoff Outerbridge Discusses World Spine Care and the Global Spine Care Initiative' and '042- J. David Cassidy, DC, PhD, DrMedSc Discusses Stroke, Concussion, Neck Pain, Whiplash and Epidemiology'.

Chiropractic Science is @ <https://chiropracticsscience.com/>

### References

Coleman, C., Hudson, S., & Pederson, B. (2017). Prioritized health literacy and clear communication practices for health care professionals. *HLRP: Health Literacy Research and Practice*, 1(3): e91-e99 <https://doi.org/10.3928/24748307-20170503-01>

Coleman, C. A., Hudson, S., & Maine, L.L. (2013). Health literacy practices and educational competencies for health professionals: a consensus study. *Journal of Health Communication*, 18 Suppl 1(Suppl 1), 82-102.

Karuranga, S., Sørensen, K., Coleman, C., & Mahmud, A.J. (2017). Health literacy competencies for European health care personnel. *HLRP: Health Literacy Research and Practice*, 1(4): e247-e256.