Delivery of Medical and Nutritional Data
Patient Activated Learning System (PALS)

LK Barré, MD, RD; A Gaines, PhD, CHES; T Young, PhD, RD; E Riddle PhD, RD; G Orie, BS; Layla Profeta; M Stafford, MD; K Roach, MD; E Baquero, EdD; J Paddock, PhD, RD; PA Cassano, PhD

**Research Background**

- Socially disadvantaged populations are disproportionately affected by nutrition-related chronic diseases
- There is a need to provide easily accessible, translated, trustworthy, relevant health and nutrition data to socioeconomically disadvantaged communities

**Objectives**

The Patient Activated Learning System (PALS) is a web-based resource that provides engaging, easily understood, and well-researched medical and nutrition information to the public

Evidence-based data is presented through the creation of reusable knowledge objects (RKOS) that are displayed on a single-objective webpage

**Methods**

- Multidisciplinary Partnership: Cornell University Division of Nutritional Science, Cornell Cooperative Extension and New York State EFNEP, Weill Cornell General Internal Medicine, PALS
- Conducted research protocols using PALS manual
- Researched PubMed, non-PubMed and primary literature reviews using PALS replicable research manual

**Process and Results**

**Rapid systematic review of nutrition scientific evidence & practice guidelines**

- Content of the page informed by a rapid systematic review process that incorporated evidence from nutrition research and practice guideline
- This influences PALS webpage contents:
  - Evidence Review Summary for professionals
  - Public-facing content at the 6-8 grade reading level
  - Manualized the evidence review process

**Assessed webpage acceptability with EFNEP educators**

- Conducted 2 cognitive interviews via Zoom with 8 EFNEP nutrition educators
- Qualitative coding and analysis of focus group and interview transcripts (through CISER research platform)
- Revise RKOS based on focus group interviews and team edits

**EFNEP participant feedback and results**

- Solicited feedback about page content clarity, appeal, helpfulness
- 2 researchers iteratively coded interview transcripts, independently summarized feedback, and discussed findings
- Pages offer relevant, easily digestible content
- Demonstrated understanding of content
- Most found content helpful and would return to PALS, citing clarity of information and perceived trustworthiness of source

**Merging RKOS webpage topics**

- RKOS based on the vegan diet including Triglycerides, LDL and HDL levels
- Concluded: insufficient data to draw upon conclusions
- Redefined Vegan diet RKOS and determined a more applicable question to define the Vegan diet
- Used the PALS protocol to redefine the vegan diet
- “Is the Vegan diet heart healthy?”
- Included HDL, LDL, blood pressure, C-RP, triglycerides

**Conclusions**

Create a strong pipeline to produce nutrition-related PALS content, including development of a course to teach the replicable process for evidence review and knowledge translation.