SCIMETRIKA: Building individual and organizational capacity to deliver effective health programs

SciMetrika focuses on the promotion of healthy behaviors. We distill and translate complex scientific information about health-related risk or protective factors to non-technical audiences. We develop and implement culturally competent health education products and services based on best practices.

Our guiding principles distinguish us from other companies. We are firm believers that health change is only possible if people are actively engaged in the change process. We improve the capacity and readiness of individuals, communities, and organizations to conquer the most complex, urgent, and important health issues facing us today. In this process, we are change agents. We empower clients to identify, acquire, and use the right methods, tools, and skills to achieve optimal health.

Building Capacity through Education

Toolkits and Educational Materials—We develop toolkits and associated educational materials for local, national, and international audiences, working closely with clients to determine the scope, information sources, and organization. We incorporate principles of cultural competency, adult learning, and plain language into planning and developing each product, and engage in extensive testing for ease of use, relevance, and comprehension. Toolkits and educational materials can be developed for accessibility and are adaptable for paper or web use. Our multi-phased approach to participatory-based toolkit development includes: (1) identification of content from multiple data sources, including state-of-the art literature, and input from diverse stakeholders; (2) engagement of diverse stakeholders, end users throughout the process; and (3) tailoring the toolkit design for cultural competence and with appropriate attention to the Cultural and Linguistic Appropriate Services (CLAS) and plain language standards, where appropriate.

Content Identification—As a first step and using our population health expertise, SciMetrika reviews background material, considers outcomes from related expert panels, conducts literature reviews and environmental scans, and considers feedback from the client leadership and other key stakeholders. We search academic literature databases, such as PubMed, to identify articles using key words agreed upon with the client. We supplement information gathered from the literature review through an environmental scan that includes Internet searches and relevant
documents or case studies provided by stakeholders that may strengthen the toolkit.

**Audience Engagement**—A thorough understanding of the knowledge base of the toolkit’s audience is key to ensuring toolkit and material relevance, and will also increase the likelihood of toolkit adoption and use. We engage members of the target audience on up to three separate occasions, including: initial toolkit outline review, at 50% completion review, and near final toolkit draft review.

**Focused Content**—We focus the content based upon adult learning principles and cultural competency. Our product designs include a generous use of white space, bullets and graphics to break up the text, short blocks of text, and use of simple and concise language to improve readability. We incorporate CLAS Standards where appropriate throughout the toolkit and materials. We work closely with the client to determine the level of interactivity and web functionality required for the toolkit and educational products. For web-based toolkits and materials, we can include more extensive interactivity, such as providing pop-ups with additional information or links to an online feedback form. For web-based products, we can ensure Section 508 accessibility compliance.

**Training**—SciMetrika provides clients the full range of training products and services, including instructor-led, eLearning, webinars, or blended learning. Our approach to training and education includes application of state-of-the-art frameworks for program translation and instructional design best practices based on adult learning theory, including the Analysis-Design-Development-Implementation-Evaluation (ADDIE) process, the agile Successive Approximation Model (SAM) approach, and Kirkpatrick’s training evaluation model.

SciMetrika determines the scope and purpose of the training by developing a description of the target population and conducting needs assessments and audience analyses with the target population. We then develop training objectives, using the SMART format (with specific, measurable, attainable, realistic, and time-based goals). In developing materials, we seek input from subject matter experts and a sample of participants, and we test the materials in focus groups with end users. Based on the analysis and the client needs, we determine the delivery mode. We bring experience in designing, developing, and delivering instructor-led, online, or blended learning. SciMetrika can deliver online courses accessible by those with audio or visual impairments and compatible with clients’ learning management systems. We provide support for training delivery, selecting skilled instructors or facilitators, preparing training packets and educational materials, recruiting training participants, and providing logistical support for training sessions. We also develop an evaluation plan in collaboration with key stakeholders to evaluate fidelity, quality of the trainer, effectiveness for the trainees, and sustainability of implementation at the organizational level. We also implement the
evaluation plan during execution of training sessions.

SciMetrika Health Education Projects

Field Epidemiology Training Program

SciMetrika enhances global readiness for Ebola response by supporting the Centers for Disease Control and Prevention (CDC) Division of Global Health Protection in providing instructional design to Field Epidemiology Training Programs (FETPs) in African countries at high risk for Ebola importation. We provide curriculum development, create training materials, and implement technical short courses for Ebola-focused emergency response, as well as broader FETP Frontline, Intermediate and Advanced courses. The successful uptake of these educational materials will allow for the rapid identification and containment of potential outbreaks, improving Ebola and other disease-associated outcomes, and reducing both disease incidence and transmission in high-risk areas.

Diabetes Toolkit

Minority communities face disproportionate risk when it comes to the onset of type 2 diabetes in comparison with non-Hispanic whites. Taking a health equity approach to address this disparity, SciMetrika assisted in the development of an evidence-based, culturally competent “Road to Health” Trainer-Trainer Toolkit, a joint initiative between the CDC and the National Institutes of Health (NIH). The goal of the Toolkit was to increase knowledge and skills regarding type 2 diabetes prevention by building capacity in community health workers (CHWs) in Hispanic/Latino and African American communities. Applying a participatory-based approach to toolkit and interactive learning development, we empowered CHWs to have a voice in the process of creating positive change by engaging them in initial training sessions to provide input on key challenges, focus areas, and messages. We coordinated the continuing education application process and translated the Toolkit into Spanish, using continued CHW feedback to guide Toolkit finalization. Then, we developed and implemented an outreach and dissemination plan. Understanding that there is no “one size fits all” approach to health education, we also created supplemental educational materials, such as a Section 508 compliant training video, and communication support by moderating a web forum customized to CHWs. To ensure training tools were effective for the intended audiences, SciMetrika involved CHWs in focus groups to evaluate them. This initiative promoted optimal health by arming CHWs with the right health information in the right format to increase the adoption of positive behaviors among high-risk groups.

Fetal Alcohol Spectrum Disorders (FASD) – Intervening with Children Education Materials

Access to early interventions is a preventative factor that improves long-term developmental outlooks for those with Fetal Alcohol Spectrum Disorders (FASD). With funding from CDC’s National Center for Birth Defects and Developmental Disabilities (NCBDDD), SciMetrika translated evidence-based components from four interventions developed for children with FASD into professional-grade materials tailored for community dissemination at health, education, and social service agencies. Educational materials were developed after conducting in-depth literature, intervention, and material reviews. We developed promotional and dissemination plans for
educational settings, early intervention programs, community mental health clinics, and family resource centers to reach the primary target audiences of providers, parents, and caregivers. The educational materials consisted of manuals and presentations, advocacy and behavior manuals, and online training. These focused educational materials improved the reach of sustainable interventions to promote overall well-being in children with FASD.