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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health



National Institutes of Health Commercialization Assistance Program (NIH-CAP)

## Company Profile

**Industry Sector:** Healthcare

**Company Overview:** BrightOutcome offers patient-centric solutions for home-based, coordinated management of chronic disease symptoms, helping patients to reduce suffering, improve daily functioning, and avoid unnecessary clinic/ER visits. Our products utilize latest patient-reported outcomes (PRO) research and e-health/telehealth technologies to conduct adaptive PRO assessments anywhere and anytime, and provide just-in-time individualized patient education content to empower patients to self-manage their symptoms. We collaborate with about a dozen top-rated research and patient-care institutions in product development/validation under many competitive NIH SBIR grants/contracts. We also work closely with the PROMIS Network, an NIH Roadmap project, to promote the use of PRO into mainstream clinical practice.

**Target Market(s):** Hospitals, homecare agencies, long-term care facilities, health plans.

## Key Value Drivers

**Technology:** At the core of our technologies is the use of advanced measurement models (e.g., item response theory (IRT) and computer adaptive testing) to administer short & adaptive questionnaires to assess symptoms. A rules-based inference engine then delivers individualized patient education content based on assessment outcomes. Patients can access the system via web, phone, and PDAs. The web-based care coordination system for providers highlights standards-based integration with EMR systems to ease the deployment and management of the system, and supports mobile devices for alerts and reminders.

**Competitive Advantage:** We are uniquely positioned to take advantage of the NIH Roadmap Project, PROMIS, a 5-year, \$25MM NIH initiative to develop and validate IRT-based PRO instruments. We work closely with the PROMIS team in defining PRO data standards and in integrating the use of PRO into mainstream clinical practice. Also, the delivery of individualized patient education content is distinctive among competing PRO-based products.

**Plan & Strategy:** Seeking strategic partner.

\*Technology funded by the NCI, NIMH and being commercialized under the NIH-CAP.

## Management

### Leadership:

DerShung Yang, PhD

### Collaborators:

PROMIS

U Arizona (Arizona Telemedicine Program, Arizona Cancer Center, Tucson, AZ)

U California (Cousins Center for Psychoneuroimmunology, Los Angeles, CA)

Evanston Northwestern Healthcare (Center on Outcomes, Research, and Education, Chicago, IL)

U Illinois (Dept. Infectious Diseases, Chicago, IL)

Northwestern U (HIV Center, Buehler Center on Aging, Health & Society, Chicago, IL)

Rush U (Comprehensive Breast Center, Chicago, IL)

U Texas (MD Anderson Cancer Center, Houston, TX)

U Washington (Seattle Cancer Care Alliance, Seattle, WA)

## Product Pipeline

Version	Main Features	Status
2.0	CAT/IRT capability. Mixed use of static and IRT questionnaires. Support for Internet, phone (IVR), and online/offline PDAs. Trend charts. Automated weekly status reports in Excel. Automated extraction of assessment data in Excel.	Available
3.0	Linking assessment results to patient education materials. Nurse dashboard. Care log. Severity-based email/pager alerts. Smartphone integration. Care event tracking. Event audits.	4Q08
4.0	Integration with PROMIS IRT item banks. Extraction of assessment data in PROMIS data standards (e.g., HL7 CDA R2). Education content authoring tool. Cancer module.	2Q09
5.0	Comprehensive EMR integration. Instrument authoring tool.	4Q09

