

Texas Medication Algorithm Project (TMAP): A Collaborative Effort

TMAP, started in 1996, is designed to develop, implement and evaluate not just a set of medication algorithms, but an algorithm-driven treatment philosophy for major adult psychiatric disorders treated in the Texas public mental health sector. The ultimate goal of TMAP is to improve the quality of care and achieve the best possible patient outcomes for each dollar of resource expended. TMAP is a treatment philosophy for the medication management portion of care, consisting of:

- 1) Evidence-based, consensually agreed upon medication treatment algorithms,
- 2) Clinical and technical support necessary to allow the clinician to implement the algorithm,
- 3) Patient and family education programs that allow the patient to be an active partner in care, and
- 4) Uniform documentation of care provided and resulting patient outcomes.

The Texas Medication Algorithm Project (TMAP) is a public and academic collaborative effort that consists of four phases. A major result of this project has been the development of medication treatment guidelines for three major psychiatric disorders:

- Schizophrenia
- Major Depressive Disorder
- Bipolar Disorder

Phase 1

This phase involved the creation of the algorithms through consensus conferences. The guidelines that were developed (in Phase 1) were based on scientific evidence and expert clinical consensus. The products that were created at the end of the conferences were specific stepwise graphical sequences (algorithms). These algorithms illustrated the order (strategies) and method (tactics) to use various psychotropic medications for each of the above mentioned conditions.

Phase 2

Phase 2 of the project was a feasibility trial and was done to evaluate the suitability and applicability of the algorithms. This portion of the project was done to see if the algorithms could be utilized adequately by physicians and clients and to estimate the outcomes that were achieved. An additional aspect of Phase 2 included the evaluation of resources needed to implement the algorithms. Thus, TMAP Phase 2 provided a preliminary estimate of the algorithm's effectiveness.

Phase 3

TMAP Phase 3 was a prospective comparison of the clinical outcomes and economic costs of using these medication guidelines with "treatment as usual" within the Texas Mental Health and Mental Retardation system. Impact on systems outside of mental health, i.e., general medical, service utilization, criminal justice, etc., were also studied. Data from TMAP Phase 3 are currently being analyzed. Over the coming months (years), presentations and articles describing the results of the project will be available.

Phase 4

Phase 4 of the project is not a scientific research project, but the actual roll out or implementation of these algorithms in the "real world" of the clinics and hospitals of the Texas Department of Mental Health and Mental Retardation. It is based upon the findings and experiences of the previous phases. This portion of the project is better known as Texas Implementation of Medication Algorithms (TIMA).

Collaboration for this project has included TXMHMR, The University of Texas at Austin College of Pharmacy, The University of Texas Southwestern Medical Center at Dallas, The University of Texas Health Science Center at San Antonio, parent and family representatives, and representatives from various mental health advocacy groups, i.e., NAMI-Texas, DMDA, Texas MH Consumers, and the Mental Health Association of Texas.

One of the goals of the TMAP project is to focus on optimizing patient outcomes with the underlying assumption that long-term resources will be optimally utilized. The ultimate goal of the project is to develop and continuously update treatment algorithms and to train systems to utilize them in order to reduce the immediate and long-term emotional, physical and financial burdens of mental disorders for clients, their families, and their health care systems.

TMAP Project Management Team Directors

- John A. Rush, M.D., The University of Texas Southwestern Medical Center - Dallas: Project Director
- Steven P. Shon, M.D., Medical Director TXMHMR: Project Co-Director
- M. Lynn Crismon, Pharm.D., The University of Texas at Austin College of Pharmacy: Project Co-Director
- Marcia Toprac, Ph.D., Deputy Medical Director for Research and Academic Collaboration, TXMHMR: Project Co-Director
- Alexander Miller, M.D., University of Texas Health Science Center at San Antonio: Schizophrenia Module Director
- Madhukar Trivedi, M.D., The University of Texas Southwestern Medical Center - Dallas: Major Depressive Disorder Module Director
- Patricia Suppes, M.D., Ph.D., The University of Texas Southwestern Medical Center - Dallas: Bipolar Disorder Module Director

The current medication algorithms and the patient and family educational materials can be accessed at the Texas Implementation of Algorithms web site:

www.mhmr.state.tx.us/CentralOffice/MedicalDirector/tima.html

Conference products - graphic presentations of the algorithms and explanatory physician's manuals are available on the TMAP Web Page:

www.mhmr.state.tx.us/CentralOffice/MedicalDirector/TMAPtoc.html

Other support materials for the project and for the roll out include implementation guidelines, clinician training requirements, and a patient/family education package that was used in Phases 2 and 3 of the study, as well as in Phase 4 of the project can also be found at this site.