### Clinical and Economic Workshop

### ACMEGSOCIETY

University of Pittsburgh

**Medical Center** 

July 12 - 13, 2007 Pittsburgh, PA

**ACMEGS** American Clinical MEG Society July 12 – 13, 2007 in Pittsburgh, PA

Dear ACMEGS Members and Friends,

I wish to thank all of you for attending the first meeting of the ACMEGS. We are pleased to provide a forum to discuss the clinical utility and the business/economics of running a successful clinical MEG service in the United States.

The workshop provides an informal and friendly atmosphere for discussing and exchanging recent studies that might lead to new clinical indications for MEG and increase the economic success of MEG. There are both short-term and long-term strategies to achieve acceptance of clinical MEG. In the short term we can help our hospitals promote the technology through various public communications including using the local and national media. It is important to work closely with the local payors and governmental regulatory bodies to ensure accurate and successful reimbursement. This will be discussed by our distinguished consultants.

In the long run, it is important to have peer-reviewed studies of the clinical effectiveness of MEG for the most common applications, epilepsy and presurgical mapping of eloquent cortex. We also should strive to publish the effectiveness of MEG in new applications such as evaluation of head trauma, schizophrenia diagnosis and stratification, and motor mapping in Parkinson's disease. Dr. Jeff Lewine will expand on this topic on the first morning.

Since this is a national conference involving many clinical sites, under no circumstances should anyone divulge their institutional billing rates or other actual billing rates. If they attempt to do so, they will be asked to leave.

During the lunch sessions we will be presenting a proposed public statement for the ACMEGS. Please take some time to think about what the Society can do for its members and share your thoughts during lunch or any other time. Remember that this is also a social event, so try to get to know all the members.

I also wish to thank our consultants David Weil and Michael Longacre for their time to come and make their presentations. Special thanks to Dr. Anto Bagic for hosting this event and making the meal arrangements.

Please enjoy the conference and dinner.

Sincerely,

Steven M. Stufflebeam, M.D. President, American Clinical Magnetoencephalography Society

Organizing Committee: Anto Bagic, University of Pittsburgh Medical Center, Pittsburgh PA Greg Barkley, Henry Ford Hospital, Detroit MI Michael Funke, University of Utah, Salt Lake City UT Roland Lee, University of California San Diego, San Diego CA Steven Stufflebeam, Mass. General Hospital, Boston MA

	Thursday, July 12, 2007			
9:00 am	Arrival / Breakfast Reception (Provided)			
10:30 am	<u>I. ACMEGS Presidential Address</u> 1. Welcome 2. Current Membership 3. Plans for 2007 and beyond			
11:00 am	<u>II. Clinical Review of Existing Studies (Jeffrey Lewine)</u> 1. Existing Clinical Studies 2. What studies are Needed 3. Improving Grants for Clinical MEG			
	Roundtable (Moderator: Jeffrey Lewine): What Future Directions/Steps Should MEG Community Pursue?			
12:15 pm	Lunch (Provided) Open discussion about goals/priorities for the Society for 2007/2008			
1:30 pm	<ul> <li><u>III. Economics</u></li> <li><u>A. Introduction and Perspective (Greg Barkley)</u></li> <li>Historical Perspective of MEG Finances</li> <li>Review of proper coding: Important items for billing personnel</li> <li>CPT and REVENUE CODES</li> <li>MEDICAID (short overview of the federal regulations)</li> <li><b>B. Federal Insurance Carriers (David Weil)</b></li> <li>MEDICARE</li> <li>Trends in utilization (importance of utilization statistics for Medicare)</li> <li>Medicare methodology for determining reimbursement</li> <li>MEDICARE: Recommendations and Important considerations for the future</li> <li>TRICARE (short overview)</li> </ul>			
Dinner (Pro	ovided) 5 pm - late			
	Friday, July 13, 2007			
8:00 am	Breakfast (Provided)			
9:00 am	<b>C. Commercial Insurance Carriers (Michael Longacre)</b> MEG reimbursement in the private sector			
	<b>Reimbursement Boot Camp - Roundtable Discussion</b>			
Noon	Lunch (Provided)			
1:00 pm	Meeting Adjourn			

### **Introduction and Perspective**

Gregory L. Barkley, M.D. Department of Neurology, Henry Ford Hospital, Detroit, Michigan Associate Professor of Neurology at Wayne State University in Detroit, Michigan

### **Clinical Review of Existing Studies**

Jeffrey D. Lewine, Ph.D. Associate Professor, Department of Neurology Executive Director, Illinois Magnetoencephalography Center Alexian Neurosciences Institute

David Weil The Weil Group, Washington DC

**Commercial Insurance Carriers** 

Michael Longacre HealthCare Marketing Strategies Inc., Yamhill, Oregon





### Patient Focus

### Patients can influence Payors

- Make your patient an advocate of MEG
- Empower patient with educational material
- Develop patient waiver so that should a denial be received, <u>the patient will contribute to the appeal</u> <u>process</u>

### HEALTHCARE

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### **Pavor Personne**

### Medical Director

- Medical Director is a licensed MD
- Makes the decision as to what is or is not covered by the payor

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- Responsible for profit and loss of the payor
- Earns bonus based upon payor's performance

HEALTHCARE



### Payor Personnel

### Medical Director

Wants a clinical presentation with a business focus

- Clinical proof demonstrating safety and efficacy via published peer reviewed articles
- Economic impact of the procedure to the bottom line
- What makes MEG unique over existing diagnostic procedures?

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### Knowledge is Power

What are the currently published values for MEG

- Physicians Fee Schedule (Medicare Part B), RBRVS
- Hosptial Outpatient Prospective Payment System, APC
   Non-Medicare RBRVS (Medicare non-covered

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procedures)Relative Values for Physicians

### HEALTHCARE





### Coverage of New Modalities by the Health Plan

Coverage is generally achieved by one of the following:

- "Grand fathered" the modality is considered part of existing standard practice
- Flying under the radar the payor is unaware of the modality as a new entity
- Technology Assessment Committees approval after a review of the published literature
- Expert Consensus positive coverage based on advice/opinions of experts
- Pressure acquiescence to political, legal and other pressure

### "Grand Fathered"

The payors have never formally examined the majority of medical diagnostics and therapeutic modalities. Instead, these interventions have been considered part of mainstream practice and covered by default. For example, lumbar laminectomy/fusion, an invasive procedure involving the spine, has never been proven to be effective but has been covered by health plans. It is usually older modalities that have come to be covered in this way.

### Fly Under the Radar

An emerging technology can sometimes be covered if the modality is so similar to an existing covered technology that an existing billing code can be utilized. The emerging technology must meet clinical criteria to be legitimately billed under the existing code. In essence the health plan does not know it is paying for a new technology. Flying under the radar has its risks: Coding could be considered fraudulent and billing for a service that is specifically not covered by the health plan's policy can result in actions later to recoup payments.

### **Technology Assessment**

This is the route to coverage that involves a formal review regarding safety and efficacy as demonstrated by clinical trials. A health plan committee or a technology assessment body/organization typically performs this activity. Blue Cross Blue Shield Association Technology Evaluation Center (BCBSA-TEC) is the best-known example and is a collaboration of the Blues health plan and Kaiser Permanente. The committee members are academically oriented physicians many of whom represent subspecialty societies such as the American College of Surgeons. The BCBSA-TEC evaluates approximately twenty new modalities each year.

Hayes, Inc is a private organization that conducts technology assessments and sells their services to health plans. Many plans that do not participate in the BCBSA-TEC utilize the Hayes technology assessment program. Aetna, CIGNA, and United all subscribe to Hayes and also take note of opinions from the BCBSA-TEC.

The Agency for Health Research and Quality (AHRQ), a US government function, performs technology assessment-largely for Medicare.

Technology assessment is very rigorous and demands a high level of evidence. Not all new treatments are put through this level of scrutiny and as stated earlier many older treatments have been grandfathered. A new technology is more likely to be looked at in this type of venue if:

- There is doubt/controversy about the usefulness of the technology
- It is an entirely new way to perform a procedure
- It is invasive
- It is costly

Requests for coverage can bring a new modality to the attention of technology assessment committees but not all new modalities go this route.

Technologies are judged based on the results of clinical trials. The BCBSA-TEC criteria:

- 1. Final approval from regulatory body (FDA)
- 2. Scientific evidence that permits conclusions on effectiveness regarding health outcomes (with emphasis on the strength of evidence)
- 3. Must improve net health outcomes
- 4. Must be as beneficial as any established alternative
- 5. Improvement must be attainable outside the investigational setting

The level of evidence is important in this process. Generally speaking, technology assessment committees expect that a modality will have efficacy demonstrated in a randomized, controlled clinical trial. Clinical trials consisting of "case series" is usually not adequate for a positive technology assessment decisions. Randomized controlled clinical trials are felt to be important because case series studies can have:

- Case selection bias
- Incomplete reporting of cases
- Placebo effect
- Inability to account for the natural history of the disease
- Inability to compare results to current modalities.

Many technologies have had difficulty with the technology assessment process because they relied on case series rather than controlled trials. Furthermore, clinical studies must be published in peer reviewed journals. Poster presentations at professional meetings and company registry data arte not considered sufficient evidence unless these are published. The technology assessment committee considers the peer review process needed for publication essential.

### Levels of Evidence

A grading scale is commonly used to rate clinical trials. (Cook DJ, et al. Rules of evidence and clinical recommendations on the use of antithrombotic agents. Chest, 1992; 4 (suppl): 305S-311S.)

- Level 1: Randomized trials that had enough power to demonstrate a statistically significant health outcome.
- Level 2: Randomized trials with results that were not statistically significant but where a larger trial might have shown a clinically important difference.
- Level 3: Nonrandomized concurrent cohort comparisons between contemporaneous patients.
- Level 4: Nonrandomized historical cohort comparisons between current patients and former patients (from the same institution or from the literature).
- Level 5: Case series without controls.

Level 1 randomized trials are the gold standard and Level 5 case series are in general considered insufficient to demonstrate efficacy.

The rationale for technology assessment relates to a concern that many emerging modalities are not effective. Given that the FDA's level of evidence is variable on the device side, health plans feel they are obligated to have a process that evaluates these modalities.

### Expert Consensus

The opinion of experts and key opinion leaders can have a major influence on coverage policies. In some cases, if there is an overwhelming expert support for a modality, health plans may choose to cover it without evaluation by technology assessment committees. During the technology assessment process, committees will look to experts regarding interpretation of the published clinical studies. Finally, expert opinion is important after coverage decision have been made. In most states denials of coverage can be appealed and sent for independent medical review. This process involves a panel of experts chosen by a third party review organization. The independent experts decide if the modality is question should be covered by the health plan for the case under consideration. Health plans will sometimes alter policies for future cases based on the results of these reviews.

### Pressure

Political pressure including legislative mandates can change coverage policies. This is more likely for emotional life threatening conditions such as breast cancer or HIV. Typically pressure comes into play when health plans decline to cover a modality and interest groups rally to alter the decision.

### **Typical Health Plan Coverage Process**

Most health plans have a medical director with the designated responsibility for medical policy and the assessment of new technologies. New technologies are evaluated and determination is made as to whether or not they should be covered based on existing policy. The clinical studies are reviewed as well as other supporting material sent to the health plan. Expert opinions regarding the technology are sought. The Medical Director may be faced with a coverage decision regarding a specific health plan member as well as the need to establish a policy.

There is some variability regarding which new modalities go to the technology assessment committees. Under some circumstances it there is reasonable clinical data and overwhelming expert support, new modalities can achieve positive coverage decisions without going the route of the technology assessment committees.

Aetna, CIGNA, HealthNet, and United Healthcare have moved to centralize the technology assessment process. The Blue Cross Blue Shield Association has a centralized technology assessment function that makes a recommendation regarding the technology. However, each individual Blues plan makes the coverage decision.

### Medicare's Process

Medicare's principal for coverage decisions is whether or not the modality is "reasonable and necessary". As was the case for the commercial payors, Medicare has grand fathered many existing technologies and does not evaluate all new technologies.

Medicare renders many coverage decisions regionally via its "local Medicare carriers". Some new modalities are simply covered if there is a new CPT code. The Medicare Medical Director and the Carrier Advisory Committee's will evaluate other technologies especially if there is controversy or doubt regarding the clinical usefulness of the intervention. The local Medicare review process tends to utilize expert opinion as well as the published literature. Compared to the BCBSA-TEC process, the Medicare evaluations are less rigorous regardfing the level of evidence required especially if there is widespread professional support for the intervention. It is a more political process. Local Medicare policies are posted on the CMS website and if several carriers cover a modality this can become de facto national policy.

Medicare will sometimes issue "National Coverage Decisions". These are more likely for controversial modalities and may also occur if there is inconsistency amongst the local policies for a given modality. National Coverage Decisions are more evidence based relying more on published clinical results than expert opinion. AHRQ frequently performs technology assessments used for the Medicare National Coverage Decisions. However, even these national decisions can be political.

### Key Steps for Obtaining National Reimbursement

The goal of obtaining national reimbursement for a new technology is a complex process that can take time. This document introduces the key steps HealthCare Market Strategies, Inc. (HMS) can guide your organization through to achieve national reimbursement. Initiating a reimbursement strategy with a sales focus early in your business plan is the best means of achieving your eventual goal, sales.

In addition to these steps, clinical studies should progress within a reasonable period of time. It is essential to rapidly get a code, and reimbursement values, because this initiates the process to obtain expanded coverage.

STEP	Goal	DESCRIPTION
1	Develop coding strategy	Thoroughly analyze the applicable codes and their reimbursement values. Develop a coding/reimbursement strategy based of your business plan.
2	Obtain support from key influencers	Contact the appropriate society(s) coding committee(s) regarding your technology with the goal of gaining their support for your coding strategy. Solidify support from specialty societies and medical luminaries.
3	Obtain temporary code	Obtain a temporary code (i.e. HCPCS, CPT III) that will be recognized electronically. This allows the provider to begin the claims process.
4	Establish reimbursement amount	Establish the claim and reimbursement amount (the value assigned to a code as a guide for payers).
5	Publish reimbursement amount	Get claim and reimbursement amount published in a third-party database utilized by providers and payors.
6	Train Sales/Marketing	Train marketing/sales staff to leverage what has been accomplished to accelerate sales and increase volume of claims submitted.
7	Market the code	Get articles published in trade journals that identify the code and reimbursement values.
8	Assist providers in the filing of claims	Implement a system (using website, email, and/or toll-free number) to respond to provider inquiries related to claim procedures.
9	Submit claims to payors and consolidate EOB reports	Obtain explanation of benefits (EOBs) from providers and consolidate payer data. An EOB is the source of data for current reimbursement decisions by payors.
10	Develop payor presentation	Survey Medical Directors from payors to gain knowledge concerning coverage insight for their individual health plans.
11	Get coverage by first payer as determined by sales	Make sales presentations to Medical Directors, utilizing information from completed surveys, supported by clinical studies and economic analysis.
12	Increase regional coverage decisions	Expand regional coverage; utilizing an EOB analysis to play one payer off the other to gain further acceptance of the technology.
13	Submit application for a CPT I code	The application must be tailored to meet a specific mindset, and should be sponsored via the most appropriate medical society.
14	Obtain CPT I code	Assist the sponsoring medical society's presentation to the AMA CPT Code Committee.
15	Obtain appropriate reimbursement amount	Assist your sponsor in developing cost data for the RUC process to support previously established reimbursement amount developed in step 4.
16	Gain national payor acceptance	Leverage code, RUC values, and obtain expanded national and regional payor coverage. Repeat steps 4, 5, 6, 7, and 8.

### Glossary

CPT (CPT I)	Current Procedural Technology (CPT) Comprehensive classification and nomenclature system for accurately identifying procedures and services performed by physicians and other health care professionals. (ICD-9 describes diagnoses)			
СРТ Ш	A temporary code for emerging technology, services, and procedures. The use of this code will allow physicians and other health care professionals and insurers to identify emerging technology, services, and procedures for clinical efficacy, utilization and outcomes.			
EOBs	Explanations of Benefits (EOBs) are forms sent to patients that explain which procedures and services were given, how much they cost, how much is covered by insurance and how much the patient must pay.			
HCPCS	Healthcare Common Procedural Coding System (HCPCS) were developed by the CMS to expand the CPT code to include services such as medical equipment and ambulance services. The HCPCSs start with a letter and have four numbers.			
LMRP (LCD)	Contractors may publish local medical review policies (LMRPs) to provide guidance to the public and medical community within a specific geographical area. These LMRPs explain when an item or service will be considered covered (including when it is "reasonable and necessary") and how it should be coded. CMS does not approve LMRPs but may review them to ensure they do not conflict with CMS's national coverage decisions. Now called Local Coverage Decisions (LCDs)			
Luminaries	Highly respected providers of the services utilized by your technology.			
Payors	Organizations that pay for medical services such as Medicare and insurance companies. The means where by a provider is compensated for their services.			
RBRVS	RBRVS: (Resource Based Relative Value Scale) for each physician fee schedule service, there are three relative values: (1) An RVU (Relative Value Unit) for physician work; (2) an RVU for practice expense; and (3) an RVU for malpractice expense. For each of these components of the fee schedule there is a geographic practice cost index (GPCI) for each fee schedule area.			
RUC	RVS Updating Committee and Members (RUC). The RUC is composed of 29 members. Twenty-three are appointed by major national medical specialty societies. This is the committee that calculates RVUs utilized in determining the RBRVS.			
RVP	Relative Values for Physicians RVP: Establish, defend and negotiate fees for medical and surgical procedures with Relative Values for Physicians (RVP). It contains relative values widely used by insurance companies and provides values for all procedures (not just those utilized by Medicare). The RVP is a relative measure of what physicians are charging for a particular service.			

Grateful acknowledgment is made to the following organizations for their generous support of this workshop in the form of education grants.













Please identify yourself:	□ Neurologist	□ Neurosurgeon			
	□ Radiologist	□ Technologist			
	□ Other				

Please rate the effectiveness using the following scale: 1 = poor 2 = below average 3 = average 4 = above average

	elow average $3 = av$	verage $4 = ab$	ove	avera	ige	5 =	excellent =
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Please rate your satisfaction with the organization of the conference/workshop.				2	3	4	5
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What other topics should ACMEGS address in future conferences?

1)
2)
3)
Additional comments?
Did you perceive commercial bias in any of the presentations? $\Box$ No $\Box$ Yes
Explain:

# DRAFT ACMEGS DOCUMENT

# DRAFT ACMEGS DOCUMENT

## ACMEGS BYLAWS

### BYLAWS OF AMERICAN CLINICAL MAGNETOENCEPHALOGRAPHY SOCIETY, INC., A NON-PROFIT CORPORATION

### ARTICLE I ORGANIZATION

1.1 The name and charitable purposes of the organization shall be as set forth in its Articles of Organization. These Bylaws, the powers of the organization and of its directors and officers, shall be subject to the Articles of Organization as in effect from time to time. The principal office of the organization in the Commonwealth of Massachusetts shall initially be located at the place set forth in the Articles of Organization.

1.2 The organization may have a seal which shall be in such form as the Board of Directors may, from to time to time, adopt or amend.

1.3 The organization may at its pleasure by a vote of the membership body change its name.

1.4 The pronoun "he" or "his," when appropriate, shall be construed to mean also "she" or "her" and the word "chairman" shall be construed to include a female.

### ARTICLE II MEMBERSHIP

2.1 Membership in this organization shall be open to those who support the purpose statement of the organization as set forth in the Articles of Organization and meet the qualifications set forth in Section 2.2. Continuing membership is contingent upon being up-to-date on membership dues which shall be paid annually on or before September 1st of each year.

2.2 There shall be two (2) classes of membership in the organization; namely, a Member class and an Associate Member class.

- a. "Members" shall include those individuals involved in the clinical use of magnetoencephalography (MEG), electroencephalograms (EEGs), magnetic resonance imaging (MRI) or computerized axial tomography (CAT) scans and possessing a Ph.D. in one of the aforementioned fields, a medical degree (M.D.) or some equal equivalent degree. Each Member shall have one vote per person at all annual and special meetings of the members.
- b. "Associate Members" shall include clinicians involved with the use of magnetoencephalography (MEG), electroencephalograms (EEGs), magnetic resonance imaging (MRI) or computerized axial tomography (CAT) scan equipment and students with an interest in any of those fields. There are no voting rights for Associate Members.

Individuals wishing to join the membership of this organization for either class of membership shall apply for admission and be nominated by an existing member of the Member

class; provided, however, that those individuals identified as directors in the Articles of Organization as originally filed with the Massachusetts Clerk of the Commonwealth shall be automatically admitted into the Member class of this organization without further application. The Membership Committee shall review and recommend either admission or denial into the membership of this organization for each application submitted, after which the entire Board of Directors shall vote to accept or reject the Membership Committee's recommendation. The vote of the Board of Directors shall be final.

2.3 The dues for each membership class shall be reviewed and set annually by the Board and any proposed changes shall be voted on at the annual member meeting.

2.4 Only those members who are current on their membership dues and are in the Members class shall be eligible to vote at any annual or special meetings of the members.

### ARTICLE III <u>MEMBERSHIP MEETINGS</u>

3.1 The annual membership meeting of this organization shall be held on the first [DAY] of [MONTH] each and every year except if such day be a legal holiday, then and in that event, the Board of Directors shall fix the day but it shall not be more than two weeks from the date fixed by these Bylaws.

3.2 The Clerk shall cause to be mailed to every member in good standing at its address as it appears in the membership roll book in this organization a notice telling the time and place of such annual meeting.

3.3 Meetings of the members may be held at such time and place, within or without the Commonwealth of Massachusetts, as shall be stated in the notice of the meeting or in a duly executed waiver of notice thereof. Notices of meetings shall be sent to all members at their addresses as they appear in the membership roll book at least ten (10) days before the scheduled date set for such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the member at such member's address as it appears on the records of the organization. Without limiting the manner by which notice otherwise may be given effectively to members, any notice to members given by the organization shall be effective if given by a form of electronic transmission consented to by the member to whom the notice is given. Any such consent shall be revocable by the member by written notice to the organization. Any such consent shall be deemed revoked if (1) the organization is unable to deliver by electronic transmission two consecutive notices given by the organization in accordance with such consent and (2) such inability becomes known to the Clerk or an Assistant Clerk of the organization, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

3.4 The presence of not less than a majority of the Members class shall constitute a quorum and shall be necessary to conduct the business of this organization; but a lesser percentage may adjourn the meeting for a period of not more than four (4) weeks from the date scheduled by these Bylaws and the Clerk shall cause a notice of this scheduled meeting to be sent to all those members who were not present at the meeting originally called. A quorum as herein before set forth shall be required at any adjourned meeting. 3.5 Special meetings of the members may be called by the President when he deems it for the best interest of the organization. Such notice shall state the reasons that such meeting has been called, the business to be transacted at such meeting and by whom it was called. At the request of a majority of the members of the Board of Directors or a majority of the Members class, the President shall cause a special meeting to be called but such request must be made in writing at least ten (10) days before the requested scheduled date.

3.6 No other business but that specified in the notice may be transacted at such special meeting without the unanimous consent of all present at such meeting.

### ARTICLE IV <u>VOTING</u>

4.1 When a quorum is present at any meeting, the vote of a majority of the Members class present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the Articles of Organization a different vote is required in which case such express provision shall govern and control the decision of such question.

4.2 Unless otherwise provided in the Articles of Organization or these Bylaws, each member of the Members class shall at every meeting of the members be entitled to one (1) vote in person or by proxy, but no proxy shall be voted on after three (3) years from its date, unless the proxy provides for a longer period.

4.3 Unless otherwise provide in the Articles of Organization, any action required to be taken at any annual or special meeting of the members of the organization, or any action which may be taken at any annual or special meeting of such members, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the members of the Members class having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which such members of the Members class were present and voted. Prompt notice of the taking of the action without a meeting by less than unanimous written consent shall be given to those members who have not consented in writing.

### ARTICLE V BOARD OF DIRECTORS

5.1 The business of this organization shall be managed by a Board of Directors consisting of the President, Clerk, Treasurer and two (2) at-large members of the Members class. The initial directors shall be appointed by the sole incorporator. Thereafter, the directors shall be elected at the annual meeting of the members in accordance with these Bylaws. Each director elected shall hold office until his successor is elected and qualified.

5.2 The at-large directors shall serve for a term of two (2) years. There shall be no limits on the number of terms an at-large director may consecutively serve. The terms of the at-large directors shall be staggered with their initial terms as set forth in the Articles of Organization as originally filed with the Massachusetts Secretary of the Commonwealth.

5.3 The Board of Directors shall have the control and management of the affairs and business of this organization. Such Board of Directors shall only act in the name of the

organization when it shall be regularly convened by its chairman after due notice to all the directors of such meeting.

5.4 A majority of the members of the Board of Directors shall constitute a quorum and the meetings of the Board of Directors shall be held regularly as such dates and times as the Board of Directors may determine, but no less than quarterly. The Board of Directors may hold meetings, both regular and special, either within or without the Commonwealth of Massachusetts.

5.5 Each director shall have one (1) vote and such voting may not be done by proxy.

5.6 Special meetings of the Board may be called by the President on five (5) days' notice to each director by mail or forty-eight (48) hours notice to each director either personally or by electronic means of communications, including electronic mail and facsimile transmission; special meetings shall be called by the President or Clerk in like manner and on like notice on the written request of one (1) director.

5.7 Unless otherwise restricted by the Articles of Organization or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes or proceedings of the Board or committee.

5.8 Unless otherwise restricted by the Articles of Organization or these Bylaws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or any committee, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

5.9 Unless otherwise restricted by the Articles of Organization or these Bylaws, any director may be removed, with or without cause, by a majority of the members entitled to vote on such directorship. Any director may resign at any time by giving written notice of resignation to the Board of Directors, to the President or to the Clerk. Any such resignation shall take effect upon receipt of such notice or at any later time specified therein. Unless otherwise specified in the notice, the acceptance of a resignation shall not be necessary to make the resignation effective.

5.10 Vacancies in the Board of Directors shall be filled by the members entitled to vote on such directorship. Each director chosen to fill a vacancy on the Board of Directors shall hold office until the next annual election of directors and until his successor shall be elected and qualified.

### ARTICLE VI OFFICERS

6.1 The officers of the organization shall be chosen by the Board of Directors and shall be a President, a Clerk and a Treasurer. The Board of Directors may also choose one or more Assistant Clerks and Assistant Treasurers. Any number of offices may be held by the same person, unless the Articles of Organization or these Bylaws otherwise provide.

6.2 The Board of Directors at its first meeting after each annual meeting of the members shall choose a President, a Clerk and a Treasurer from those members of the Board of Directors, and may elect one or more Assistant Clerks and Assistant Treasurers as the Board of Directors shall deem to be in the organization's best interests.

6.3 The Board of Directors may appoint such other officers and agents as it shall deem necessary who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board.

6.4 No officer shall for reason of his office be entitled to receive any salary or compensation, but nothing herein shall be construed to prevent an officer or director for receiving any compensation from the organization for duties other than as a director or officer.

6.5 The officers of the organization shall hold office until their successors are chosen and qualify. Any vacancy occurring in any office of the organization shall be filled by the Board of Directors. Any officer elected or appointed by the Board of Directors may be removed at any time by the affirmative vote of a majority of the Board of Directors. Any officer may resign at any time by giving written notice of resignation to the Board of Directors, to the President or to the Clerk. Any such resignation shall take effect upon receipt of such notice or at any later time specified therein. Unless otherwise specified in the notice, the acceptance of a resignation shall not be necessary to make the resignation effective.

6.6 The President shall be the chief executive officer of the organization, shall have general and active management of the business of the organization and shall see that all orders and resolutions of the Board of Directors are carried into effect. The President shall preside at all meetings of the members and of the Board of Directors at which he is present. The President shall have all powers and duties usually incident to the office of the President except as specifically limited by a resolution of the Board of Directors. The President shall have such other powers and perform such other duties as may be assigned to him from time to time by the Board of Directors.

6.7 The Clerk shall attend all meetings of the Board of Directors and all meetings of the members and record all the proceedings of the meetings of the organization and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. He shall give, or cause to be given, notice of all meetings of the members and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or President, under whose supervision he shall be. He shall have custody of the corporate seal of the organization and he, or an Assistant Clerk, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his signature or by the signature of such Assistant Clerk. The Board of Directors may give general authority to any other officer to affix the seal of the organization and to attest the affixing by his signature.

6.8 The Assistant Clerk, or if there be more than one, the Assistant Clerks in the order determined by the Board of Directors (or if there be no such determination, then in order of their election) shall, in the absence of the Clerk or in the event of his inability or refusal to act, perform the duties and exercise the powers of the Clerk and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

6.9 The Treasurer shall have the custody of the corporate funds and shall keep full and accurate accounts of receipts and disbursements in books belonging to the organization and shall deposit all monies and other valuable effects in the name and to the credit of the organization in such depositories as may be designated by the Board of Directors. He shall disburse the funds of the organization as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the President and the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all his transactions as Treasurer and of the financial condition of the organization. He shall exercise all duties incident to the office of Treasurer.

6.10 The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election) shall, in the absence of the Treasurer or in the event of his inability or refusal to act, perform the duties and exercise the powers of the Treasurer and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

### ARTICLE VII COMMITTEES

7.1 The Board of Directors may create committees as needed, such as executive, audit, and public relations. There shall be one standing committee – the Membership Committee. Except for members of the Membership Committee, membership in any committee created by the Board of Directors may contain such numbers of Members and Associate Members as the Board of Directors may reasonably determine.

7.2 No less than three (3) directors of the Board of Directors shall be appointed by the Board of Directors and shall serve as the members of the Membership Committee.

7.3 The Membership Committee shall have responsibility for reviewing applications for admission and making recommendations with respect such applications to the full Board of Directors.

### ARTICLE VIII GENERAL PROVISIONS

### CHECKS

8.1 All checks or demands for money and notes of the organization shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

### **FISCAL YEAR**

8.2 The fiscal year of the organization shall be fixed by resolution of the Board of Directors.

### BOOKS AND RECORDS

8.3 The books of the organization shall be kept at such place as the Board of Directors shall designate by resolution.

### ARTICLE IX INDEMNIFICATION; LIMITATION ON LIABILITY

9.1 Each director and officer of the organization shall be indemnified to the fullest extent now or hereafter permitted by law in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or officer of the organization or is or was serving at the request of the organization as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Without limiting the generality of the foregoing, the organization shall indemnify each person within the scope of the foregoing to the extent to which it is given the power to do so by Section 8.56 of the Massachusetts Business Corporations Act of the Commonwealth of Massachusetts as in effect on the effective date of these Bylaws or as thereafter amended. To the extent permitted by applicable law, the organization shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the organization, or is or was serving at the request of the organization as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against him and incurred by him in any such capacity or arising out of his status as such whether or not the organization would have the power to indemnify him against such liability under applicable. law.

9.2 A director of the organization shall not be personally liable to the organization or its members for monetary damages for breach of fiduciary duty as a director except for liability (i) for any breach of the director's duty of loyalty to the organization or its members, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 8.56 of the Massachusetts Business Corporations Act of the Commonwealth of Massachusetts, as the same exists or hereafter may be amended, or (iv) for any transaction from which the director derived an improper personal benefit. If the Massachusetts Business Corporations Act hereafter amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of the organization, in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended Massachusetts Business Corporations Act. Any repeal or modification of this Article IX by the members of the organization shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the organization existing at the time of such repeal or modification.

### ARTICLE X AMENDMENTS

10.1 These Bylaws may be altered, amended, repealed or added to by an affirmative vote of not less than a majority of the members entitled to vote thereon.