MOLST Statewide Expansion Evaluation Report

Prepared by:
Deborah Gurewich, PhD
Heather E. Posner, MSPH

In cooperation with:
Linda Cragin, MS
Christine McCluskey, RN, MPH
Table of Contents

Executive Summary .......................................................................................................... v
1 Introduction ........................................................................................................... 1
2 Methods .............................................................................................................. 2
3 Results ............................................................................................................... 3
   3.1 Characteristics of Survey Respondents .............................................................. 3
   3.2 Degree of MOLST Adoption ........................................................................... 4
   3.3 Experience with MOLST Technical Assistance Resources ......................... 5
   3.4 Practices of MOLST Early Adopters ............................................................... 7
      3.4.1 Characteristics of Study Sites ............................................................... 7
      3.4.2 Overview of MOLST Adoption ........................................................... 8
      3.4.3 Common Themes ............................................................................... 10
4 Conclusions .......................................................................................................... 11
   4.1 Study Limitations ......................................................................................... 12
Appendix A Glossary ................................................................................................. 13

List of Tables

Table 1. Number and Percentage of Institutions Contacted that Completed the Survey .. 3
Table 2. Characteristics of Study Sites ............................................................................. 8

List of Figures

Figure 1. Type of Institutions Participating in the Survey ............................................. 4
Figure 2. Primary Role of Survey Respondents ............................................................ 4
Figure 3. Implementation of MOLST Policies and Staff Training ............................ 5
Figure 4. Timeline of Institutional Use of the MOLST Form ....................................... 5
Figure 5. Type of MOLST Technical Assistance Resources Reported Being Used ...... 6
Figure 6. Evaluation of MOLST Technical Assistance Resources .............................. 6
Figure 7. Additional Informational and Training Needs Identified ............................. 7
Executive Summary

Medical Orders for Life Sustaining Treatment (MOLST) is both a process and a standardized form used to translate life-sustaining treatment preferences into valid medical orders that can be honored and accessed across health care settings in Massachusetts. Massachusetts aims to expand the use of MOLST among all providers, an effort lead by the Massachusetts Department of Public Health (DPH), the Executive Office of Elder Affairs (EOEA), and the University of Massachusetts Medical School (UMMS). In July 2012, the Center for Health Policy and Research (CHPR) at UMMS was asked by the MOLST project team to evaluate the early statewide MOLST expansion effort; specifically to determine the degree to which institutions are adopting MOLST, assess how providers use MOLST technical assistance resources, and identify common practices among MOLST early adopters. To address these aims, the evaluation surveyed provider institutions across the state and conducted interviews with key informants at select “early adopter” sites.

Evaluation findings indicated that provider institutions are taking steps to adopt MOLST. Three-quarters of the institutions surveyed had designated a MOLST clinical champion and a similar percent had begun to use the MOLST form (or anticipated doing so soon). Surveyed institutions had also developed MOLST policies and procedures and trained staff, although these two activities were less widespread than use of the MOLST form and clinical champion designation. Survey findings further suggest that the MOLST technical assistance (TA) resources have been helpful in both advancing knowledge about MOLST and guiding institutions about how to implement MOLST.

A closer examination of eight early adopter sites suggest that organizational adoption of MOLST is facilitated by the presence of strong leadership and culture around EOL care, the willingness and ability to invest resources in MOLST adoption activities, and the use of external resources to support adoption efforts. Key informants also identified on-going challenges, including how to secure and maintain stakeholder buy-in and how to manage patient transfers among provider sites that do not honor MOLST.

Given the positive response to MOLST technical resources reported among survey and interview respondents, we recommend that existing web-based TA resources be maintained, especially related to developing MOLST policies and procedures, staff training, stakeholder buy-in, and guidance around patient transfers. These efforts could help ensure that institutional policies, procedures and staff training related to MOLST are keeping pace with use of the MOLST form and to support institutions in their efforts to sustain MOLST adoption. This report is issued as the DPH prepares to promulgate regulations which require Massachusetts licensed hospitals, long term care facilities, clinics and assisted living residences to provide information about advance care planning, palliative care and end of life options to patients diagnosed with a terminal illness or those who may benefit from these services.
1 Introduction

Medical Orders for Life Sustaining Treatment (MOLST) is both a process and a standardized form used to translate life-sustaining treatment preferences into valid medical orders that can be honored and accessed across health care settings in Massachusetts. MOLST began as a mandate in the Acts of 2008 to implement a "POLST Paradigm" pilot program in at least one area of the Commonwealth. This was followed by a MOLST Demonstration Project in the greater Worcester area during 2010. Based on experience from the demonstration, the Commonwealth now seeks to expand the use of MOLST among all provider institutions statewide.

Coordination of the Massachusetts MOLST statewide expansion is a collaboration of the Massachusetts Department of Public Health (DPH), the Massachusetts Executive Office of Elder Affairs (EOEA), and Commonwealth Medicine at the University of Massachusetts Medical School (UMMS). In July 2012, the Center for Health Policy and Research (CHPR) at UMMS was asked by the MOLST project team to evaluate the early statewide MOLST expansion effort. In this report, conducted mid-way through the first year of statewide implementation expansion, we describe early findings related to the following evaluation aims:

1. Determine degree to which institutions are adopting MOLST;
2. Assess how provider staff use and experience the MOLST expansion technical assistance resources; and
3. Identify best practices among MOLST early adopters.

This report is designed to provide feedback to the project leadership, committees, workgroups, and state partners on the implementation status of, as well as technical assistance strategies utilized by, the “early adopters” of MOLST. This report is issued as DPH prepares regulations for Section 227 of MGL, Chapter 111 which requires Massachusetts licensed hospitals, long term care facilities, clinics and assisted living residences to provide information about advance care planning, palliative care and end of life options to patients diagnosed with a terminal illness or those who may benefit from these services.

---

1 The National Physicians Order for Life Sustaining Treatment (POLST) Paradigm originated in Oregon in 1991 from a need for end-of-life planning based on conversations between patients, loved ones, and medical providers. The Paradigm was developed to improve the quality of patient care and reduce medical errors by creating a system that identifies seriously ill patients' wishes regarding medical treatment, and communicates and respects these wishes through portable medical orders. Adapted from the National POLST website, http://www.polst.org. Accessed March 31, 2014.
2 Methods

To address evaluation Aims One and Two, we developed and fielded an on-line survey to representatives of provider institutions across the state. Survey questions were designed to assess both an institution’s level of MOLST implementation and its experience with MOLST technical resources. Questions related to MOLST implementation assessed an institution’s progress in reaching three stages of adoption: 1) Preparation (measured by appointment of a clinical champion); 2) Development (measured by establishment of MOLST policies and procedures) and; 3) Launch (measured by staff trained in MOLST).\(^2\) Questions related to MOLST technical assistance resources asked respondents about the type of MOLST technical assistance strategies they used, their level of satisfaction with those resources, and any additional technical assistance needs related to implementing MOLST.

The sample and associated contact information for the survey were provided by the MOLST program leadership. The list was comprised of people that had registered for one or more technical assistance sessions or downloaded the MOLST form. Both these actions required the user to provide a name and contact information. Additional names and contact information were added by the MOLST regional coordinator for DPH Region 4 (Boston Metro) based on her work with health institutions operating in that region. These three sources yielded a sample of 499 individuals representing 310 unique institutions from among an estimated 739 potential institutions.\(^3\)

The Office of Survey Research (OSR) at UMMS fielded the survey between March 18 and April 12, 2013. Survey results were analyzed using descriptive statistics. For questions related to implementation, the unit of analysis was the institution. In some instances, multiple responses were obtained from different individuals within the same institution. In those instances where there were two survey responses, we first analyzed the pair of surveys to assess degree of concordance within the institution. If the two respondents agreed on a question (e.g., both reported that the institution had a clinical champion), we kept the institution in the sample but only recorded data for one of the respondents for that question. If the two respondents disagreed (e.g., one respondent indicated that the site was already using the MOLST form but the second indicated that it was not planning to use the form for another six months), we excluded the institution from the analysis of that question. For questions related to the use of and satisfaction with MOLST technical resources, the unit of analysis was the individual respondent.

---

\(^2\)These three implementation stages were developed by the program leadership during the pilot phase of the MOLST statewide expansion.

\(^3\)Potential institutions were identified from lists maintained by the Massachusetts Department of Public Health, trade associations, websites, and email communications with the MOLST program. The reported total of 739 may overestimate the actual number of all licensed institutions in the state given ongoing changes in delivery system composition over time, including incorporations, closures and mergers.
To address evaluation Aim Three, we conducted key informant interviews with clinical champions of eight “early adopter” institutions. Early adopter institutions were defined as those that had accomplished all three stages of adoption (defined above), as indicated by their survey responses. From the sub-group of early adopters, we selected sites based on provider type (seeking an even mix of nursing homes and hospitals). Within provider types, we sought institutions that represented various regions in the state (West, Central, North, South, and Boston Metro). For each site, we interviewed the clinical champion by phone using a semi-structured interview guide. Interview questions were designed to describe the organizational story of MOLST: how institutions implement MOLST, the factors that help to facilitate adoption, and implementation challenges and how they were overcome. All interviews were conducted by a team of two researchers, one leading the interview and the other taking notes. Following each interview, interview notes were written up as Word files and imported into Atlas.ti, a software package that supports qualitative data coding and analysis. We content coded all interviews, established inter-rater reliability through cross-coder checks and team meetings to resolve differences, and identified dominant themes that emerged from the interviews.

3 Results

3.1 Characteristics of Survey Respondents
In total, 196 individuals representing 155 institutions completed the survey. We received two surveys from 41 institutions and one survey from the other 114 institutions. At the respondent-level, this represents a response rate of 39% (196/499); at the institutional-level, the response rate was 50% (155/310). Survey response rates by institution type ranged from 38% for home health agencies to 57% for hospitals (Table 1).

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>No. Institutions Contacted</th>
<th>No. (%) Institutions Completing Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals*</td>
<td>84</td>
<td>48 (57%)</td>
</tr>
<tr>
<td>Nursing Homes</td>
<td>179</td>
<td>88 (49%)</td>
</tr>
<tr>
<td>Hospice Agencies</td>
<td>26</td>
<td>11 (42%)</td>
</tr>
<tr>
<td>Home Health Agencies</td>
<td>21</td>
<td>8 (38%)</td>
</tr>
</tbody>
</table>

*Includes both acute care and non-acute care hospitals.

Figure 1 shows that slightly over half of the institutions that participated in the survey were nursing homes (55%) and another 29% were hospitals. Hospice and home health agencies each accounted for 6% of participating institutions.
Figure 1. Type of Institutions Participating in the Survey

![Pie chart showing the distribution of institutions participating in the survey.](image)

**“Other” institutions include assisted living and rehabilitation facilities, multi-service facilities, and healthcare systems.**

With respect to the specific individuals who completed the survey on behalf of their institution, the majority of respondents were either clinical staff (38%) or administrators (30%) (Figure 2). Another 17% comprised clinical directors and 15% reported serving in some other role.

Figure 2. Primary Role of Survey Respondents

![Pie chart showing the distribution of primary roles of survey respondents.](image)

**“Other” includes educational, consultant, quality assurance, staff support, and development functions.**

### 3.2 Degree of MOLST Adoption

Survey results indicated that three-quarters (75%) of the responding institutions had already designated a clinical champion (achieving Stage 1: Preparation). Results further indicated that about one-quarter (26%) of institutions had already developed MOLST policies and procedures (achieving Stage 2: Development), and over one-third (36%) had developed training for staff (achieving Stage 3: Launch) (Figure 3). Additionally, 43% of institutions reported that they were in the process of developing policies and procedures, and over one-quarter (27%) were in the process of developing staff training.
Only 1% of institutions indicated that they did not plan to develop either MOLST policies and procedures or MOLST training for staff.

**Figure 3. Implementation of MOLST Policies and Staff Training**

A final implementation question asked respondents about their institution’s plans to use the MOLST form (Figure 4). One-third of the institutions (33%) indicated that they were already using the MOLST form, while 44% reported that their institution had plans to begin using the form within the next six months. About one in ten institutions (11%) indicated that they were not planning to use the form for at least another six months or more.

**Figure 4. Timeline of Institutional Use of the MOLST Form**

3.3 Experience with MOLST Technical Assistance Resources

When asked about the type of MOLST technical assistance resources individuals had used (Figure 5), three-quarters of survey respondents (75%) identified the MOLST Implementation Tool Kit. The second most commonly reported technical assistance resource used was the MOLST on-line trainings (66%). Less commonly reported, but still used by at least one-half of respondents, were the MOLST conference calls and video.
When asked to evaluate the MOLST technical assistance resources they used, the majority of respondents reported favorably on their experience (Figure 6). For example, over half (53%) the respondents reported that the technical resources increased their understanding of MOLST a lot, and another 40% indicated that the technical resources increased their understanding of MOLST somewhat. A similar pattern was observed in response to whether the technical resources helped with implementation: 48% reported it helped a lot and 44% said that it helped somewhat. Less than 10% indicated that the technical resources they used were not helpful at all, either in increasing knowledge about MOLST or in helping to implement MOLST. Importantly, however, almost all respondents (95%) reported that they would recommend MOLST technical resources to others.
The final question in the survey asked respondents to indicate what, if any, additional information about MOLST would be helpful to their institution (Figure 7). Respondents identified the following topics as additional information that would be helpful: how to generate interest in MOLST among institutional staff and leadership (58%), how to administer MOLST forms (52%), how to develop policies (52%), and how to develop training (51%).

Figure 7. Additional Informational and Training Needs Identified (n=178)

*Examples of “Other” information requested included: how to engage physicians, how to easily obtain forms, and help with understanding MOLST definitions.

3.4 Practices of MOLST Early Adopters

3.4.1 Characteristics of Study Sites
Table 2 provides select descriptive characteristics of the eight study sites selected for further study about their early adoption of MOLST. Three of the four hospital sites were acute care hospitals and one was a long-term acute care hospital. Among the four skilled nursing facilities, one site also provided sub-acute care services, another rest home services, and a third long-term care services. Four of the eight sites were independently operated, stand-alone facilities (more common among the nursing homes in our sample) and three operated within a larger corporate structure. In addition, the eight sites were selected to achieve broad regional representation: two in Boston Metro, one in the North, two in the South, two in the West, and one in Central Massachusetts.
Table 2. Characteristics of Study Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Institution Type*</th>
<th>Size**</th>
<th>Ownership***</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ACH</td>
<td>Small</td>
<td>IND</td>
</tr>
<tr>
<td>B</td>
<td>ACH</td>
<td>Large</td>
<td>IND/ACO</td>
</tr>
<tr>
<td>C</td>
<td>ACH</td>
<td>Medium</td>
<td>CORP</td>
</tr>
<tr>
<td>D</td>
<td>LTACH</td>
<td>Medium</td>
<td>CORP</td>
</tr>
<tr>
<td>E</td>
<td>SNF; sub-acute</td>
<td>Small</td>
<td>IND</td>
</tr>
<tr>
<td>F</td>
<td>SNF</td>
<td>Small</td>
<td>IND</td>
</tr>
<tr>
<td>G</td>
<td>SNF; rest home</td>
<td>Small</td>
<td>IND</td>
</tr>
<tr>
<td>H</td>
<td>LTC; SNF</td>
<td>Small</td>
<td>CORP</td>
</tr>
</tbody>
</table>

*Institution type: ACH=acute care hospital; LTACH=long term acute care hospital; SNF=skilled nursing facility; LTC=long term care

**Number of beds: <150=small; 150-300=medium; >300=large

***Ownership: IND=independent; ACO=accountable care organization; CORP=corporate

3.4.2 Overview of MOLST Adoption

Findings from the interviews indicate that sites had established clinical champions (Stage 1: Preparation), developed MOLST policies and procedures (Stage 2: Development), and seven of eight sites had trained staff about MOLST (Stage 3: Launch); one site was just beginning to train staff at the time of the interview. All sites had begun to honor incoming MOLST forms, and six of eight had begun to administer MOLST forms. In this section, we briefly describe how study sites operationalized the three stages of adoption, as well their approaches to MOLST use and administration.

3.4.2.1 Three Stages of Adoption

Sites varied in the number of MOLST champions they had and the type of staff who occupied the role. Four sites designated one champion, and four (two hospitals and two nursing homes) assigned two staff champions. The types of staff that assumed the role of champion ranged from a physician trained in palliative medicine to nurses involved in quality improvement, professional development, clinical research, and case management. Nurse champions at two hospital sites shared the champion role with a physician. At one site, the lead champion established unit-level champions to serve as resources for staff.

With respect to developing policies and procedures, hospital sites were more likely than nursing homes to use the example MOLST policy available from the Massachusetts MOLST website as the starting point for establishing their own policies. In contrast, three of the four nursing homes reported that they relied on their existing policies and procedures developed for advance directives (ADs) which, from these nursing homes’ perspective, needed minimal revision to accommodate policies and procedures specific to MOLST. All but one nursing home also reported adopting the MOLST form as their primary AD to be used with newly admitted patients. It should be noted that MOLST was not designed to replace ADs. In contrast to ADs, MOLST is a medical order intended for use only by seriously ill patients, since it becomes effective immediately when signed.
Seven of eight sites relied on their champions and members of their MOLST task forces and subcommittees to lead the policy development process. One hospital participated in a MOLST policy development effort initiated by its corporate-level ethics committee. The committee members for this site, including the hospital champion, developed a MOLST policy to be used and customized by all system institutions.

For staff training, all sites relied primarily on in-service, formal presentations. Most sites used the training materials provided by the statewide MOLST project as the basis for these presentations and related handouts. One site used a customizable presentation developed by their corporate steering committee, which the champion adapted for staff training sessions. Hospital sites tailored their trainings to different clinical units (e.g., nursing, emergency departments); some hospital sites also conducted more targeted, one-on-one trainings. Nursing home sites also relied on other methods, for example, using existing staff with special skills and knowledge (e.g., staff education nurses and hospice social workers) to educate other staff about MOLST. Of note, approaches to physician training tended to vary across sites and included use of learning packets, the MOLST video, an education webinar offering Continuing Medical Education credits, and intensive training sessions with physicians to ensure nuanced conversations with patients in various clinical units.

### 3.4.2.2 Using the MOLST Form

All sites were honoring MOLST forms and six were administering MOLST with existing or newly admitted patients. Reported confusion over DPH protocols regarding use of MOLST, as well as use of the Comfort Care/Do Not Resuscitate (CC/DNR) form currently also sanctioned by the DPH, led two sites to defer administering MOLST. It should be noted that MOLST is expected to eventually replace the CC/DNR form but that during the MOLST expansion phase, the use of both documents is acceptable. Most sites’ first experience with honoring a MOLST form occurred with the arrival of one or more patients transferred from other institutions that participated in the initial MOLST pilot program. All eight sites adopted procedures that require physicians to review and approve incoming MOLST forms. For example, physicians at one hospital assess an incoming patient’s current status and determine whether the MOLST order is appropriate and if not, initiate a conversation with the patient regarding needed changes. At one nursing home, honoring an incoming MOLST form requires the doctor of record to personally verify the existing orders.

With respect to administering MOLST, it was beyond the scope of the study to assess spread and reach within each study site. However, we did learn that four of the eight sites (one hospital and three nursing homes) had integrated the administration of MOLST into routine care planning, and one of these sites (the hospital) had set a goal to contact all incoming appropriate patients within a week of admission about whether they want MOLST. At this one site, a nurse, social worker, or case manager provides patients with general information about end-of-life (EOL) care and/or ADs; later, the physician or physician’s assistant introduces a more detailed conversation with patients about their plan of care and the MOLST form.
3.4.3 Common Themes

3.4.3.1 Importance of Leadership and Culture
Organizational leadership and culture played a role in facilitating MOLST adoption across all eight sites but the relative role of these two factors varied by type of setting. The four nursing homes (and to some extent, the long term acute care hospital) reported a relatively straightforward adoption process due to their existing institutional culture oriented to improving the quality of EOL care since and routine discussion of EOL issues and ADs with appropriate patients. The nursing home sites also tended to be relatively small and organizationally flat, which further helped to facilitate adoption.

In contrast, the hospitals served a more clinically diverse patient population and did not have a culture specifically oriented to EOL care. They also tended to be larger, more complex organizations. The role of leadership proved to be especially important at these sites. At two hospitals, leadership came from the corporate parent; at the other two, leadership arose more organically. The champion at the largest hospital described the challenge of communicating about MOLST in a way that was relevant to thousands of employees working across many clinical departments. Adoption at this hospital required persistence on the part of the champion to navigate administrative hurdles, retrofit procedures, and generate buy-in from staff and providers. It also involved enlisting the support of key staff involved with quality improvement, clinician education, patient relations, and social work.

3.4.3.2 Willingness and Ability to Invest in Organizational Resources
Organizational adoption of MOLST required resource investments but the amount and type of resource investment varied across sites. Those sites with a culture centered on EOL care were more likely to have the staffing and technical resources needed for MOLST adoption. For example, use and administration of MOLST was achieved without major shifts in practice or organizational orientation. Hospitals, however, tended to require larger resource investments. The two corporately-owned hospitals benefitted from system-level resources that provided organizational support and momentum for MOLST adoption. In contrast, the champion at the largest independent hospital lacked a system-level sponsor and broad internal backing, and by extension, had access to fewer resources, including protected time and administrative support. This in turn made adoption more challenging and limited the degree to which the champion was able to promote MOLST and shift provider attitudes, two key steps in the adoption process.

Another resource investment related to MOLST adoption was the need to integrate the MOLST form into patient records. All sites had EMR systems but not all chose to integrate the MOLST form into these systems. Two of the nursing home sites opted not to store MOLST and other AD paperwork in their EMRs, in part due to worries that their systems were unreliable. For the remaining six sites, the process of modifying EMRs to accommodate MOLST required assistance from their information technology departments. Sites that successfully integrated MOLST forms found that it helped to promote awareness of MOLST among physicians and other staff.
3.4.3.3 Use of External Resources

The MOLST website fulfilled a significant role as the chief source of information on MOLST used by hospitals and nursing homes. The toolkit, FAQs, and video training materials served as the main sources of content for presentations and handouts. Hospital informants characterized the MOLST website as a great resource, which they used primarily to assist policy development and training. Champions from half of the sites also participated in conference calls and live seminars sponsored by the MOLST program. Reliance on the sample MOLST policy was greatest at the two hospitals whose adoption of MOLST was not part of a system-wide initiative or a continuation of existing policies and procedures.

MOLST adoption at some sites benefited from their early exposure to EOL and MOLST resources obtained from external entities, including: the Massachusetts’ Coalition for the Prevention of Medical Errors, the Conversation Project,4 Massachusetts General Hospital, LeadingAge Massachusetts,5 the Centers for Medicare and Medicaid, and industry literature. All sites gained firsthand experience from patients arriving with signed MOLST forms. Some sites have now begun to conduct their own MOLST outreach within the broader community of patients, organizations, institutions, and providers they serve.

4 Conclusions

Findings from this evaluation suggest that provider institutions across the Commonwealth are taking steps to implement MOLST. As expected, institutions are furthest along with Stage 1 of MOLST adoption (Preparation: appointing a clinical champion). Less expected was that institutions were also further along with using the MOLST form relative to Stage 2 (Development: establishing MOLST policies and procedures) and Stage 3 and (Launch: staff training). This is a curious pattern since the feasibility of using the MOLST form would seem to depend on an institution having first established MOLST policies and procedures and trained staff. At the same time, findings from the key informant interviews suggest that for many sites, their first encounter with a MOLST form was from an incoming patient from one of the MOLST pilot hospitals. It is possible that the reality on the ground triggers some sites to begin honoring the MOLST form before they have had a chance to implement fully developed policies and trainings.

In any case, the findings from the survey suggest that provider institutions could benefit from additional guidance and training around MOLST policy development and staff training, especially physician education. Findings from the key informant interviews also

---

5 LeadingAge Massachusetts (formerly MassAging) represents the full continuum of mission-driven, not-for-profit providers of health care, housing and services for older persons in Massachusetts http://www.leadingagema.org/. Accessed October 9, 2013.
suggest that institutions may be unclear about the difference between MOLST and existing protocols, i.e., ADs and CC/DNR forms. MOLST was not designed to replace ADs. In contrast to ADs, MOLST is a medical order intended for use only by seriously ill patients, since it becomes effective immediately when signed. With respect to CC/DNR, MOLST is expected to eventually replace the CC/DNR form but during the MOLST expansion phase, the use of both documents is acceptable. The CC/DNR form offers only the option of “Do Not Resuscitate,” while MOLST provides several other options, including whether to accept or refuse life-sustaining treatments.

Results from the key informant interviews at “early adopter” sites identified three factors that might help to facilitate MOLST adoption: 1) the presence of organizational leadership or culture centered on EOL care, 2) the willingness and ability of institutions to invest resources in MOLST adoption activities, and 3) the use of external resources to support adoption. While the finding around the importance of leadership and culture is not surprising, it can be one of the less mutable features of an organization. However, we believe the remaining two factors present opportunities for the MOLST initiative in terms of promoting a two-pronged message that: 1) effective adoption of MOLST will require investing adequate resources, and, 2) external resources, most importantly, the MOLST website and related technical assistance, can be tapped to support the effort.

A final set of findings suggest that institutions have benefited from the MOLST technical resources yet continue to want more guidance. Specific areas identified include policy development and staff training, garnering buy-in from key stakeholders including patients and physicians, physician education in particular, and guidance around how to manage patient transfers involving provider institutions that do not honor MOLST. In addition, more direct outreach to and collaboration with EOL organizations, religious leaders, and providers in the community may help foster support for MOLST within institutions that lack strong leadership, an institutional culture, or patient population sympathetic to EOL discussions.

4.1 Study Limitations
Results from the evaluation are not without limitations. First, the MOLST survey targeted a small, non-random sample of Massachusetts provider institutions. The survey sample comprised only those institutions that had prior contact with the MOLST Statewide Expansion program. Consequently, we do not know whether the survey sample is representative of all health care institutions across the state. Reliance on a small, non-random sample means we cannot generalize responses to institutions not included in our sample. Second, the omission of survey responses from institutions where we received two conflicting survey responses may have introduced further bias specific to findings related to MOLST implementation. However, this would only be true if these institutions behaved differently in some systematic way from the larger sample, which we believe is highly unlikely. Third, we cannot say for certain that our limited number of interviews with early adopters captures the diversity of successes and challenges experienced by institutions currently engaged in MOLST implementation across the state.
Appendix A  Glossary

Definitions were obtained from the “Glossary of Terms” located at the Massachusetts Medical Orders for Life-Sustaining Treatment website: [http://www.molst-ma.org/resources/glossary-of-terms#ad](http://www.molst-ma.org/resources/glossary-of-terms#ad) (Accessed February 24, 2014).

**Advance directive (AD)**

A general term referring to a written document to direct future medical care in the event that a person loses capacity to make health care decisions (i.e. becomes “incapacitated.”). It sometimes results from the process known as advance care planning. A health care proxy or a living will is considered to be an advance directive.

**Comfort Care/Do Not Resuscitate Verification protocol (CC/DNR)**

A protocol followed by emergency medical service (EMS) personnel when encountering an authorized CC/DNR Verification Form outside of a hospital setting. The CC/DNR protocol directs that a patient in respiratory or cardiac arrest be made as comfortable as possible, but that no resuscitative measures be attempted.

**Health care proxy (HCP)**

A document in which a person appoints a health care agent to make future medical decisions in the event that the person becomes incapacitated. This may be an outcome of the advance care planning process and is expressly authorized in Massachusetts by statute (MGL 201D).

**Living will (LW)**

A document in which a person specifies future medical treatments in the event of incapacity, usually at end of life or if one becomes permanently unconscious, in a persistent vegetative state or “beyond reasonable hope of recovery.” Since there is no statute in Massachusetts that expressly authorizes living wills, they are not considered to have legal authority. They may, however, be used as evidence of a person’s wishes.

**Medical (or Physician’s) Orders for Life-Sustaining Treatment (MOLST /POLST)**

A document intended for seriously ill patients that documents decisions for life-sustaining treatment based on the patient’s current condition. A MOLST form becomes effective immediately upon signing and is not dependent upon a person’s loss of capacity. It does not take the place of a health care proxy. Consideration of MOLST may be an outcome of the advance care planning process.
For more information, please contact Deborah Gurewich at (508) 856-6726.