

## **Characteristics of Massachusetts Hospitals' Reconciling Medications Implementation Activities**

Hospitals participating in the Massachusetts Reconciling Medications Collaborative were surveyed to ascertain characteristics of their implementation efforts as well as the effectiveness of the Collaborative. The survey was administered by the Center for Survey Research, Boston, Massachusetts. All 50 hospitals with teams participating in the Collaborative were sent a survey, with 42 (84%) team responses received.

Highlights of the survey results are included here. Table 1 provides a summary of the characteristics of participating teams' reconciling implementations, identifying who has primarily been assigned responsibility for the various phases of the reconciling process and what time frames are being used, among other factors. Table 2 summarizes key characteristics of the hospital teams' implementation strategies, such as team leadership, program reporting, and leadership engagement.

These survey results should be used with caution. They reflect the stated practice of each participating team at the time of the survey. For many hospitals, their reconciling implementation strategies are constantly being tested and revised, and therefore the survey's snapshot may no longer be valid. In addition, success of the reconciling implementation efforts varied across participating hospitals, but the characteristics reported here are not linked to that relative success. A forthcoming article slated for publication in the January 2006 *JCAHO Journal on Quality and Patient Safety* provides further analysis of the survey results, noting that the implementation strategies most strongly correlated with success included active physician and nursing engagement, having an effective improvement team, using small tests of change, having an actively engaged senior administrator, and sending a team to multiple Collaborative sessions.

The Reconciling Medications Collaborative was developed and implemented by the Massachusetts Coalition for the Prevention of Medical Errors and the Massachusetts Hospital Association and funded by a cooperative agreement between the Agency for Healthcare Research and Quality (AHRQ) and the Massachusetts Department of Public Health (#U18 HS11928).

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**Table 1****Reconciling Practices of Collaborative Hospitals***Results of evaluation surveys received from 42 participating hospital teams***Who collects the pre-admission medication history?**

|                        | Always | Sometimes | Rarely | Never | N/A |
|------------------------|--------|-----------|--------|-------|-----|
| Physicians/PA/NP       | 3%     | 28%       | 24%    | 41%   | 3%  |
| Nurses                 | 62%    | 28%       | 3%     | 0%    | 7%  |
| Pharmacists            | 7%     | 7%        | 17%    | 66%   | 3%  |
| Other (please specify) |        |           |        |       |     |

Six hospitals noted "other", specifying quality improvement staff, psych clinicians, and mixed models using physicians on one unit, nurses on one unit

Separately, 12 hospitals noted that they had guidelines for when to engage pharmacy

**Who has primary responsibility for comparing the patient's medication history to the admit orders and reconciling differences?**

|                  |     |
|------------------|-----|
| Physicians/PA/NP | 24% |
| Nurses           | 60% |
| Pharmacists      | 0%  |
| Other            | 10% |
| N/A              | 7%  |

Several hospitals noted shared/duplicative responsibilities (i.e. both physicians and nursing)

**Time frame for completing reconciling**

|  |     |
|--|-----|
| 24 hours   | 47% |
| 24 hours for majority, shorter time frame under specified conditions | 21% |
| 4 hours  | 3%  |
| ASAP   | 3%  |
| No standard set (yet)  | 26% |

Three hospitals reported four hours for certain drugs, three reported eight hours for critical meds, and one reconciled within shift admitted if needed, one "time next dose due"

Specifically for a total joint replacement patients pilot

**Does the reconciling form stay as a permanent part of the patient's record?**

| Yes | No  | N/A |
|-----|-----|-----|
| 59% | 24% | 17% |

**Has the reconciling medications process been automated by building links to:**

|                     | Yes | No  | N/A |
|---------------------|-----|-----|-----|
| Admissions database | 14% | 74% | 12% |
| Pharmacy database   | 14% | 74% | 12% |
| MAR                 | 7%  | 81% | 12% |
| Discharge orders    | 10% | 79% | 12% |

**Note:** totals may not add to 100% due to rounding

**Table 2****Characteristics of Collaborative Hospitals' Reconciling Medications Implementation Experience***Results of evaluation surveys received from 42 participating hospital teams***How engaged has the administration been?**

| Very Engaged | Moderately Engaged | Minimally Engaged | Not Engaged | N/A |
|--------------|--------------------|-------------------|-------------|-----|
| 21%          | 43%                | 29%               | 7%          | 0%  |

**Did CEO assign a senior administrator to be accountable for this project?**

| Yes | No  | N/A |
|-----|-----|-----|
| 48% | 48% | 5%  |

**Was dedicated staff time set aside to support the team?**

| Yes | No  | N/A |
|-----|-----|-----|
| 45% | 52% | 2%  |

**Were incentives offered to reward team progress?**

| Yes | No  | N/A |
|-----|-----|-----|
| 5%  | 95% | 0%  |

**How often were program reports provided to:**

|                             | Once a Month or More | Quarterly | Less than Quarterly | Never | N/A |
|-----------------------------|----------------------|-----------|---------------------|-------|-----|
| CEO or Senior Administrator | 21%                  | 26%       | 36%                 | 12%   | 5%  |
| MSEC                        | 7%                   | 19%       | 45%                 | 21%   | 7%  |
| Board-level Committee       | 2%                   | 21%       | 38%                 | 26%   | 12% |

**Reconciling team leadership characteristics (50 teams)**

|            | Yes |
|------------|-----|
| Co-leaders | 52% |

Discipline represented\*

|                   |     |
|-------------------|-----|
| Quality/RM/Safety | 54% |
| Nursing           | 42% |
| Pharmacy          | 42% |
| MDs               | 12% |
| Administration    | 2%  |

\* 76 leaders from 50 teams, so totals add to &gt;100%

**How much turnover among the leadership positions?**

| None | A little | A lot | N/A |
|------|----------|-------|-----|
| 38%  | 36%      | 24%   | 2%  |

**Prior to this project, how much experience had you had with the rapid cycle improvement model (PDSA)?**

|       |          |      |
|-------|----------|------|
| A lot | A little | None |
| 40%   | 43%      | 17%  |

**How useful was the rapid-cycle improvement model (small tests of change)?**

|             |                 |                   |             |     |
|-------------|-----------------|-------------------|-------------|-----|
| Very Useful | Somewhat Useful | Not Useful at All | Did Not Use | N/A |
| 38%         | 38%             | 7%                | 12%         | 5%  |

**About how many small tests of change have you done to date?**

|     |      |     |             |     |
|-----|------|-----|-------------|-----|
| 16+ | 6-15 | 1-5 | Did Not Use | N/A |
| 17% | 26%  | 40% | 14%         | 2%  |

**Groups engaged in data collection activities**

|             |   |           |        |       |     |
|-------------|---|-----------|--------|-------|-----|
|             | Always  | Sometimes | Rarely | Never | N/A |
| Physicians  | 0%  | 12%       | 21%    | 60%   | 7%  |
| Nurses      | 60%   | 17%       | 12%    | 10%   | 2%  |
| Pharmacists | 19%   | 33%       | 10%    | 33%   | 5%  |
| Other       | Staff from quality department/risk management<br>(e.g. performance improvement coordinator)<br>Nursing education, nursing leadership, light duty nurses,<br>nursing grad students |           |        |       |     |

**Note: totals may not add to 100% due to rounding**