



# Evaluating One Strategy for Including Reflection in Medical Education and Practice

Meghan Veno; Hugh Silk, MD, MPH; Judith A. Savageau, MPH; Kate M. Sullivan

**BACKGROUND AND OBJECTIVES:** Reflective writing in medicine allows for the opportunity to analyze, interpret, and learn from clinical experiences. The purpose of this study was to evaluate the beneficial effects of reflective reading and writing for a department using a weekly listserve.

**METHODS:** The Department of Family Medicine and Community Health at the University of Massachusetts Medical School sends out a weekly reflective writing story written by its members to celebrate clinical/teaching success. We conducted a 19-item questionnaire in the summer of 2014 among all 402 members.

**RESULTS:** Questionnaires were completed by 161 of 402 (40%) readers and 50 of 122 (41%) writers. Readers found many benefits; 84% reported learning “a lot” about how a colleague handled a certain clinical situation, while 79% found that the reflective writing listserve helped them feel more connected to colleagues. A total of 83% reported that reading the weekly story positively affected their empathy and patient centeredness. Those who reported reading the stories most often were more likely to report achieving the most benefits. The majority of respondents who wrote stories agreed with all suggested benefits of writing; 73% reported that writing allowed them to celebrate a patient/research/teaching encounter that they were proud of, and 72% reported that it gave them better perspective or clarity about a patient experience “a lot” of the time.

**CONCLUSIONS:** As departments struggle with provider burnout and feelings of being overwhelmed and disconnected, strategies like a reflective writing listserve may be a means to improve support and inspire clinicians and learners to feel fulfilled.

(Fam Med 2016;48(4):300-4.)

Accreditation Council for Graduate Medical Education recently incorporated reflective capacity into their standards.<sup>2</sup> Strategies for encouraging reflection have included journaling, portfolios, video essays, and blogs.<sup>2,5-7</sup>

Despite the emphasis on reflection, there is a shortage of evidence substantiating its value.<sup>5,6</sup> Our study assessed the effect of a reflective writing project at the University of Massachusetts Medical School (UMMS). The “Thursday Morning Memo” (TMM) was created in 2008 to share primary care teaching and clinical “success stories.” A story is written voluntarily and spontaneously and sent out weekly to the listserve of the Department of Family Medicine and Community Health at UMMS. The stories are meant to end on a positive note but may include difficult experiences.<sup>8</sup> Table 1 outlines the details of the project. We sought to evaluate the effects—in particular, on clinician humanity and attitude toward practice—that reading and/or writing had on listserve members.

## Methods

The TMM listserve reaches 402 clinicians, residents, residency graduates, non-clinical faculty/staff (eg,

**M**edicine is relying more on technology yet also demanding more patient-centered care. Reflective practice has emerged as one possible strategy to address this dichotomy. Reflection—remembering, analyzing, and interpreting past experiences—is crucial to developing the “balanced professionalism” that exemplifies great

clinicians.<sup>1-3</sup> It challenges us to re-evaluate actions, motivations, and attitudes that influence events<sup>2,4,6</sup> and can shed light on situational aspects that originally went unnoticed.<sup>4,5</sup>

Medical journals (eg, *JAMA*) have sections dedicated to reflective essays, while others, (eg, *Medical Humanities*) are entirely devoted to stories and humanism. The

From the Department of Family Medicine and Community Health, University of Massachusetts Medical School, Worcester, MA.

**Table 1: Reflective Writing Listserv Details**

Listserve Process	<ul style="list-style-type: none"> <li>• Submissions are sought with the following instructions: Please write the memo as a short essay, reflection, poem, or story about your clinical/teaching success (keep it to one page). Please de-identify the patient or learner. Ideally, please ask the patient or learner if it is OK to write about them.</li> <li>• Writers are notified if their piece is accepted or if it needs more work. Most pieces are eventually accepted. Minimal editing is done to keep the pieces as raw as possible and to encourage everyone to write.</li> <li>• A brief introduction is written by the editor for each piece.</li> <li>• Readers are encouraged to comment about the writing or email the writer.</li> </ul>
Readers/audience	<ul style="list-style-type: none"> <li>• Weekly story, essay, poem sent to members of the UMass Department of Family Medicine and Community Health listserv, which includes faculty, residents, staff, research staff, interested students.</li> <li>• New residents, faculty, and students are added continuously.</li> <li>• Members of the listserv can unsubscribe at any time.</li> </ul>
Writers	<ul style="list-style-type: none"> <li>• Writers are faculty, staff, residents, etc on the listserv who feel moved to write.</li> <li>• Writing is solicited from learners during certain times of the year (eg, home visit experience, reflective writing workshops).</li> <li>• All writing is voluntary. Writers can remain anonymous although this is rare.</li> </ul>
Confidentiality/HIPPA	<ul style="list-style-type: none"> <li>• Submissions are screened for the standard 18 HIPPA PHI identifiers and edited accordingly.</li> </ul>

**Table 2: Characteristics of Survey Respondents\***

		n** (%)
Respondent type	Learners***	42 (26.3)
	Clinicians	86 (53.7)
	Non-clinical faculty/staff	32 (20.0)
Length of time in practice	≤ 20 years	59 (36.7)
	> 20 years	37 (23.0)
	N/A (Still in training)	35 (21.7)
	N/A (Non-clinician)	30 (18.6)
Patient care setting	Residency-based site	64 (39.8)
	Non-residency-based site	38 (23.6)
	Medical student (variety of settings)	13 (8.0)
	N/A (Do not see patients)	38 (23.6)
	Other	8 (5.0)
Length of time receiving the Thursday Morning Memo	≤ 3 years	64 (40.5)
	> 3 years	94 (59.5)
Frequency of reading the Thursday Morning Memo	Every week/most weeks	134 (83.3)
	Monthly/few times a year	25 (15.5)
	Never	2 (1.2)

\* n=161

\*\* n's for each characteristic may not total to 161 because of sporadic missing data.

\*\*\* Learners = medical students 14 (8.8%), residents 26 (16.2%), fellows 2 (1.3%)

administrators, researchers) and students interested in family medicine. A 19-item online questionnaire was developed (based on qualitative responses gathered in a 2009 survey

of TMM members; available on request from the authors) and distributed during July-August 2014. An email was sent to introduce the questionnaire, which was emailed

1 week later, followed by three reminders. The questionnaire asked about members' demographics, consistency of reading, and perceived benefits of reading/writing.

Data were analyzed using SPSS (V22.0) (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0, Armonk, NY: IBM Corp). Univariate statistics described questionnaire items while chi-square and *t* tests examined relationships using an alpha of .05 for statistical significance. Several questions were asked about the degree of benefit the TMM provides using Likert scales (eg, 1= “a little”; 5=“a lot”) and then dichotomized to 1/2/3 versus 4/5 for bivariate analyses.

The study was granted an exemption by the UMMS Institutional Review Board.

## Results

Completed questionnaires were received from 161 of 402 members (40%); demographics/practice characteristics are displayed in Table 2.

Most respondents (83%) reported that the TMM positively affected their empathy and patient-centeredness (data not shown). The majority of respondents reported the benefits of TMM reading to be a 4 or 5 (Table 3); eg, 84% noted that a benefit was learning how a colleague handled a clinical situation while 79% reported that the TMM helped them feel more connected to colleagues. Twice as many non-clinical faculty/staff

(80%) reported they felt the TMM helped them learn more about the breadth of family medicine compared to learners (36%) or clinicians (40%) ( $\chi^2=16.43$ ,  $P<.001$ ; data not shown).

There were significant associations with reading frequency (Table 4). Compared to infrequent readers, those who reported reading every week/most weeks were more likely to report a greater benefit in finding inspiration for their study/practice of medicine (74% versus 43%,  $P=.006$ ), learning about patients' social/cultural backgrounds (67% versus 30%,  $P=.001$ ), and feeling greater compassion for patients and their families (70% versus 32%,  $P=.001$ ). Feeling more connected to family medicine colleagues was also seen as a greater benefit among frequent readers (84% versus 50%,  $P<.000$ ).

Approximately two-thirds (67%) of respondents reported discussing the TMM with others; 25% discussed stories with other readers and 31% with other non-TMM persons. Over half (55%) reported emailing the TMM to non-listserve individuals, and nearly all (95%) noted they would recommend the TMM to others. When asked how they would rate the TMM compared to other humanities essays, 53% ranked it

as “the same,” and 44% thought it was “better.”

Of the 122 writers to date, 50 (41%) answered questions about writing. Most were female (70%) with an even split between learners (residents/fellows: 30%, students: 18%) and providers (faculty: 30%, community doctors: 21%). Regarding writing benefits (Table 5), 73% noted that writing allowed them to celebrate a clinical/teaching encounter that they were proud of, and 72% noted that it gave them better perspective about an experience.

## Discussion

The TMM was created with the hopes that celebrating clinical successes would help family physicians stay motivated. With 69% agreeing that the TMM inspires their practice, it appears that this particular format for reflection is effective and may play a role in maintaining career satisfaction. Given that the TMM was also created in reaction to the distance that technology creates between clinicians, patients, and colleagues, it is intriguing that the majority (79%) felt this technology-based story-telling medium brought them closer together. As one respondent commented, “Nice to share with others when so often we are isolated

**Table 3: Benefits of Reading the Thursday Morning Memo\***

Benefit	Benefited “A Little”** n*** (%)	Benefited “A Lot”** n*** (%)
Learn how a colleague or a family doctor/provider handled a certain situation.	24 (16.3)	123 (83.7)
Helps me feel more connected to my colleagues/the family medicine community.	29 (21.3)	107 (78.7)
Inspiration for study/practice of medicine.	38 (30.9)	85 (69.1)
Increase level of compassion for patients and their families.	49 (35.8)	88 (64.2)
Learn more about patients' social/cultural backgrounds.	57 (38.8)	90 (61.2)
Learn more about breadth of family medicine.	76 (52.4)	69 (47.6)

\* n=161

\*\* Respondents were asked to rate each benefit on a scale of 1–5, with 1 being “a little” and 5 “a lot.” Variables were recoded to “a little” including a response of 1, 2, or 3 and “a lot” including responses of 4 or 5.

\*\*\* n's for each benefit described may not total to 161 because of sporadic missing data as well as a planned skip pattern in the survey for non-clinical faculty/staff.

**Table 4: Levels of Benefits of Reading the Thursday Morning Memo (TMM) Associated With the Consistency of Reading\***

Benefit	Read the TMM Every Week/ Most Weeks n** (%)	Read the TMM Once a Month/A Few Times a Year n** (%)	P Value
Inspiration for study/practice of medicine Benefited a little Benefited a lot	25 (26.3) 70 (73.7)	12 (57.1) 9 (42.9)	.006
Learn more about breadth of family medicine Benefited a little Benefited a lot	61 (49.2) 63 (50.8)	15 (71.4) 6 (28.6)	.059
Learn more about patients' social/ cultural backgrounds Benefited a little Benefited a lot	41 (33.1) 83 (66.9)	16 (69.6) 7 (30.4)	.001
Increase level of compassion for patients and their families Benefited a little Benefited a lot	34 (29.6) 81 (70.4)	15 (68.2) 7 (31.8)	.001
Learn how a colleague or a family doctor/provider handled a certain situation Benefited a little Benefited a lot	17 (13.8) 106 (86.2)	7 (29.2) 17 (70.8)	.063
Helps me feel more connected to my colleagues/the family medicine community Benefited a little Benefited a lot	18 (15.8) 96 (84.2)	11 (50.0) 11 (50.0)	<.001

\* n=161

\*\* n's for each benefit described may not total to 161 because of sporadic missing data as well as a planned skip pattern in the survey for non-clinical faculty/staff. For example, the question on benefit of inspiring practice/study of medicine was only responded to by learners and clinicians and not non-clinical faculty or staff.

with the way medicine has become so electronic.”

After formal training, learning from colleagues becomes difficult. Our model offers continuous learning; 84% felt that reading enabled them to learn from their peers, and 61% reported increased cultural awareness. The importance of sharing stories was highlighted by one respondent: “Work can become routine. Good writing and good stories have the potential to open eyes to the wonder of the work we do. That helps me to be more human in my patient care and teaching.”

That the benefits of inspiration, connection, and learning were greater when stories were read more often

(regardless of practice type or length of time in practice) might suggest that frequency of reading, not provider differences, accounts for these benefits (though further study would be necessary to ascertain a causal relationship). While only approximately a quarter of the listserv has written, those who did found that it inspired their work and deepened their clinical experiences.

Perhaps it should come as no surprise that our TMM is so effective. Studies suggest that physicians who reflect tend to be more empathetic, and treating patients with greater compassion leads to increased patient satisfaction.<sup>5,7,9</sup> Evidence indicates that physicians who treat

patients with empathy are more likely to treat themselves well.<sup>7</sup> Many physicians report that reflective writing helps process emotions, improves mood, and prevents burn-out.<sup>6,10</sup>

Our study has several limitations. Since we did not assess the nature of respondents' attitudes toward reflection in general, it is possible that our respondent pool includes a large number who feel positively about reflection and are therefore more likely to rate the TMM highly. We had limited learner response due to emails expiring post-graduation, and our survey was of one specialty within one institution. We were not able to assess non-response bias due to

**Table 5: Level of Benefit Among Those Who Wrote for the Thursday Morning Memo\***

Benefit	Benefited "A Little"*** n (%)***	Benefited "A Lot"*** n* (%)***
Celebrates a patient/research/teaching encounter that I was proud of.	13 (27.1)	35 (72.9)
Allows me to gain a better perspective or clarity about a patient/ experience.	14 (28.0)	36 (72.0)
Inspires my study of/practice of medicine.	15 (30.6)	34 (69.4)
Deepens my humanity to understand my patients/students/colleagues better.	16 (32.7)	33 (67.3)
Makes connections about what went well, what I could change with the encounter.	20 (41.7)	28 (58.3)

\* total n of writers=50

\*\* n's for each benefit described may not total to 50 (of 122 total writers) because of sporadic missing data.

\*\*\* Respondents were asked to rate each benefit on a scale of 1–5, with 1 being "a little" and 5 "a lot." Variables were recoded to "a little" including a response of 1, 2, or 3 and "a lot" including responses of 4 or 5.

limited information on nonrespondents. Lastly, the study was based on self-report, which may not be a true representation of respondent's actions.

As family medicine departments struggle with provider burnout and feelings of being disconnected, strategies like creating a reflective writing listserve may be a means to improve support and inspire feelings of fulfillment.

**ACKNOWLEDGMENTS:** Financial Support: The project described was supported by HRSA Grant No. 5U77HP03016 through the MassAHEC (Area Health Education Centers) Network, and the contents are solely the responsibility of the authors and should not be construed as the official position nor should any endorsement be inferred by HRSA, HHS, or the US Government.

Presentations: Silk H, Savageau JA, Venno M. A Department-Wide Reflective Writing List-Serve: Evaluating One Strategy for Incorporating Reflection Into Medical Education and Practice. Presented at the 2015 Society of Teachers of Family Medicine Annual Spring Conference, Orlando FL.

The authors wish to thank Linda Cragin (and MassAHEC) for financial and personnel support of the TMM and this study as well as providing editorial assistance to the final manuscript text, and Joanne Dombrowski for distributing the weekly TMM and this study's questionnaire.

**CORRESPONDING AUTHOR:** Address correspondence to Ms Venno, Medical Student, Class of 2018, University of Massachusetts Medical School, 55 North Lake Avenue, Worcester, MA 01655. 978-501-5528. meghan.venno@umassmed.edu.

## References

1. Aukes LC, Geertsma J, Cohen-Schotanus J, Zwierstra RP, Slaets JPJ. The development of a scale to measure personal reflection in medical practice and education. *Med Teach* 2007;29(2-3):177-82.
2. Wald HS, Reis SP. Beyond the margins: reflective writing and development of reflective capacity in medical education. *J Gen Intern Med* 2010;25(7):746-9.
3. Kok J, Chabeli MM. Reflective journal writing: how it promotes reflective thinking in clinical nursing education: a students' perspective. *Curationis* 2002;25(3):35-42.
4. Schön DA. Teaching artistry through reflection in action. *Educating the reflective practitioner: educating the reflective practitioner toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass Inc, 1987.
5. Sandars J. The use of reflection in medical education: AMEE Guide No. 44. *Med Teach* 2009;31(8):685-95.
6. Bernard AW, Gorgas D, Greenberger S, Jacques A, Khandelwal S. The use of reflection in emergency medicine education. *Acad Emerg Med* 2012;19(8):978-82.
7. DasGupta S, Charon R. Personal illness narratives: using reflective writing to teach empathy. *Acad Med* 2004;79(4):351-6.
8. Silk H, Bibace R, Lawrence A. Sharing our stories: our department's weekly list-serve of success stories. Presented at the 2010 Society of Teachers of Family Medicine (STFM) Annual Spring Conference, Vancouver, BC, Canada. <http://www.fmdrl.org/index.cfm?event=c.beginBrowseD&clearSelections=1&criteria=silk#2888> Accessed January 18, 2015.
9. Stewart M, Brown JB, Donner A, et al. The impact of patient-centered care on outcomes. *J Fam Pract* 2000;49(9):796-804.
10. Krasner MS, Epstein RM, Beckman H, et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA* 2009;302(12):1284-93.