2014 Northern New England Regional Survey of Healthcare Professionals' Continuing Education Needs: Review of Results

Mary G. Turco, EdD
Assistant Professor of Medicine, Geisel School of Medicine at Dartmouth
Learning and Professional Development Consultant, Center for Learning and Professional Development
Dartmouth-Hitchcock

Lisa Jackson, MPH
Healthcare Research Analyst, Center for Learning and Professional Development, Dartmouth-Hitchcock

Curtis Olson, PhD
Assistant Professor of Medicine, Geisel School of Medicine

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Disclosure

I have NO financial interests or relationships with commercial companies to disclose.

Dartmouth-Hitchcock

- Patient population: 1.2 million in Northern New England
- Main campus: Dartmouth-Hitchcock Medical Center in Lebanon, NH
- 2 affiliated hospitals and 24 Dartmouth-Hitchcock Clinics
- Partnerships with Geisel School of Medicine at Dartmouth and the VA Medical Center in White River Junction, VT
- Train 400 residents and fellows annually in 46 programs

Assessment Team

Principal Investigator

Curtis Olson, PhD

Assistant Professor of Medicine, Geisel School of Medicine

Co-Investigator

Mary Turco, EdD

Consultant, Center for Learning and Professional Development, Dartmouth-Hitchcock

Assistant Professor of Medicine, Geisel School of Medicine at Dartmouth

Research Assistant

Lisa Jackson, MPH

Healthcare Research Analyst, Center for Learning and Professional Development, Dartmouth-Hitchcock

Context

- Health sciences education is…
  - Shifting from knowledge dissemination to practice improvement
  - Aligning with QI
  - Placing greater emphasis on clinical opportunities
  - Increasing the need for workplace collaboration

- A comprehensive needs assessment provides critical input into decision-making about educational programming priorities (supplemented with other information)

- Traditional needs assessments are subject matter oriented; this needs assessment was innovative
- Survey items ("opportunities for improved patient care"):
  - Came from clinicians themselves
  - Were patient- and practice-focused, as opposed to disease-focused

Overall Aim

Align education with sustainable D-H Health System improvement and regional population health improvement.

Goals

1. Produce high-quality, actionable information for continuing education (CE) decision-makers.
2. Identify opportunities for practice enhancement.
3. Identify current and preferred use of informational technologies/media for CE.

Healthcare Professionals in Target Population

- Healthcare organization leaders and providers in Northern New England: Western MA, ME, NH, Eastern NY, and VT
- Identified using CME/CNE database containing 33,000+ unique individuals (as of March 2014)

Design

A two-phase design using two online questionnaires (Q1 and Q2):

Q1

- **Goal:** Generate an opportunity list of clinical/patient care focus areas to present to Q2 survey respondents
- **Recipients:** Healthcare organization leaders, managers, and supervisors

Q2

- **Random, Stratified Sample:** Physicians, nurses, medical assistants, pharmacists, psychologists, therapists, dieticians, EMTs/paramedics, healthcare organization leaders, and others
- **Goal:** Ask respondents to rate the Q1-generated opportunities to improve clinical/patient care

Criteria for Q1 and Q2 Participants

- Healthcare professional with formal training in medicine, nursing, psychology, physical therapy, etc.
- Directly involved in patient care
- Currently practicing/providing patient care (e.g., not retired or on an extended leave)

Q1 Invitations and Responses

March 17 – April 10, 2014

	INVITED			RESPONSES	
	NH	MA-ME-NY-VT	Total	Total Individuals	Total Opportunities
Healthcare Leaders and Providers	305	119	424	93	**436**

436 total opportunities reviewed and synthesized to yield list of
80 opportunities for Q2

Q2 Invitations and Responses

May 23, 2014 – June 3, 2014

	Count
Invitations Sent	4,161
Undeliverable	450
Completed Surveys	**655**
Response Rate	**17.7%**

Q2 Survey Respondents by Occupation

Occupation	Count	% of Total: 655
Nurse (RN, BSN)	**260**	**39.7**
Physician	**159**	**24.3**
Other (e.g., cardiac sonographer, MRI technician, optometrist, etc.)	66	10.1
Nurse Practitioner	**52**	**7.9**
Therapist (e.g., physical, occupational)	25	3.8
Psychologist/Counselor	23	3.5
Administrator/Manager/Executive/Director	20	3.1
Physician Assistant	15	2.3
Licensed Practical Nurse	13	2.0
Dietician/Nutritionist	7	1.1
Nursing Assistant	7	1.1
Emergency Medical Technician/Paramedic	4	0.6
Medical Assistant	4	0.6
Total	**655**	**100%**

Top Five Ratings: All Physicians vs. All Nurses

	All Physicians	All Nurses
1	Improving care transitions from inpatient to outpatient.	Improving interdisciplinary communication between team members.
2	Making more efficient use of the EHR.	Improving follow-up with discharged patients.
3	Reducing medication errors.	Involving patients more in the decision-making process.
4	Improving coordination of care.	Doing a better job of preventing infections.
5	Having discussions with patients with cancer about what quality of life means to them.	Improving communication with families about what is occurring with their loved ones.

Top Priorities for All Physicians That Were Not Top Priorities for All Nurses*

	Physicians	Nurses
Making more efficient use of the EHR.	2	28
Reducing medication errors.	3	16
Improving coordination of care.	4	14
Having discussions with patients with cancer about what quality of life means to them.	5	20
Supporting lifestyle modifications to improve diet, exercise, and weight loss.	6	42

*"Improving care transitions from inpatient to outpatient" was highly rated for each:

- Physician: 1
- Nurses: 8

Top Priorities for All Nurses That Were Not Top Priorities for All Physicians

	Nurses	Physicians
Improving interdisciplinary communication between team members.	1	38
Improving follow-up on patients discharged from the hospital.	2	26
Involving patients more in the decision-making process.	3	31
Doing a better job of preventing infections.	4	42
Improving transitions to home and community services.	6	35

Top Five Ratings: D-H Physicians vs. All Physicians

	D-H Physicians	All Physicians
1	**Improving care transitions from inpatient to outpatient.**	**Improving care transitions from inpatient to outpatient.**
2	**Improving coordination of care.**	**Making more efficient use of the EHR.**
3	Improving care for elderly and frail patients.	Reducing medication errors.
4	Treating patients with chronic medical needs *and* psychiatric issues.	**Improving coordination of care.**
5	**Making more efficient use of the EHR.**	Having discussions with patients with cancers about what quality of life means to them.

Top Five Ratings: D-H Nurses vs. All Nurses

	D-H Nurses	All Nurses
1	**Doing a better job of preventing infections.**	**Improving interdisciplinary communication between team members.**
2	**Improving interdisciplinary communication between team members.**	**Improving follow-up on patients discharged from the hospital.**
3	**Improving communication with families about what is occurring with their loved ones.**	Involving patients more in the decision-making process.
4	Improving coordination of care and transfer of information across organizations and care settings.	**Doing a better job of preventing infections.**
5	**Improving follow-up on patients discharged from the hospital.**	**Improving communication with families about what is occurring with their loved ones.**

Information Technologies/Media for CE

- Most commonly used **media** were: email, video websites (e.g., YouTube), PowerPoint websites (e.g., SlideShare), and podcasts
- **Computers** were most commonly used, followed by tablets and smartphones
- There was a significant gap between *current* **social media** and **technology use** and *preferred* use
  - Respondents reported that they preferred to use nearly *all* social media and technologies at rates that were *lower* than their current usage

Key Findings on Aim to Align Education with Sustainable Health System Improvement and Population Health

- Healthcare professionals' learning priorities **to improve clinical care**:
  - Can differ by profession or topic substantially, or can overlap
    - Both present opportunities
  - Reflect current, rather than desired, systems and cultures
  - Need alignment by opportunities (gaps) within professions and systems
  - Require workplace-based, interprofessional, collaborative practice training (e.g., in teams, small groups, service lines, simulations)
- Health system and regional healthcare leaders need **innovative leadership education** to address complex clinical, operational, cultural, and educational challenges
- Healthcare professionals need (want) **better**, **not more**, learning technology

Implications of Key Findings/Results

- Frontline clinicians perceive the quality of care to be lacking, and thus education to be most needed, in the following areas:
  - Interdisciplinary and interprofessional learning
  - Relations and communication between professions
  - Transitions and coordination of care
  - Systems issues (EHR, errors, etc.)
  - Elderly patients' care
  - Patient-centered care
  - Applying guidelines

Implications of Key Findings/Results… continued…

- As we change clinical care, we must target education offerings to clinicians' specific, pre-determined needs
- Faculty development and technology usage are affected by generational issues:
  - Clinical-educators are the least wired – they struggle with EHRs and are apt not to see its greatest benefit = personal performance data on patient care
    - They see mainly Q measures about errors
  - The least-wired generation is teaching the most-wired, most technological, and best-educated Millennials
    - Millennials can find expert opinion in scientific literature and medical specialty info online immediately
    - Millennials need patient communication skills, the art of medicine, and mentoring (that elders have little time to do)
  - All need creative, innovative teaching methods and delivery systems = more visual, video-based education targeted to learners' needs

Uses for the Survey Data

- Identify overlapping opportunities/gaps aligned with IOM, AAMC, ACGME, ACCME, ANCC and Institute for Interprofessional Practice priorities – and develop strategies to fill them
- Prioritize operational and financial support for specific learning activities, personnel, and resources
- Justify improvements in learning technology
- Better understand clinical learning needs inside and outside professional service lines/areas/departments and systems
- Write education grants with compelling data points
- Explore the data for important trends regarding professional differences and interprofessional learning opportunities
- Collaborate with stakeholders on further research

Limitations

- Weighted to NH respondents (more in database)
- Excluded those who had not taken part in Dartmouth CME/CNE programs
- Some records lacked current (or correct) email contact information
- Distribution did not allow for analysis at individual state level
- Generalizable to DHMC campus only
- Response rate may be due to online survey fatigue (vs. face-to-face, telephone, or US mail)

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Brian Sites, MD
Curtis Olson, PhD
Lisa Jackson, MPH
Cara Clark, BS

For more information:

Mary G. Turco, EdD
Mary.G.Turco@Hitchcock.ORG
(603) 653-6608