

**Alison E. Turnbull, D.V.M., M.P.H., Ph.D.**  
*Curriculum Vitae*

May 16, 2018

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Alison Turnbull

**DEMOGRAPHIC INFORMATION**

**Current Appointments**

- 2015 – present      Assistant Professor, Pulmonary & Critical Care Medicine, Johns Hopkins University School of Medicine
- 2015 – present      Assistant Professor, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health (joint appointment)

**Personal Data**

Division of Pulmonary and Critical Care Medicine  
Department of Medicine  
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**Education and Training**

- 2002      Bachelor of Arts (B.A.), Carleton College, Minnesota
- 2006      Doctor of Veterinary Medicine (D.V.M.), Tufts University School of Veterinary Medicine, Massachusetts
- 2006      Master of Public Health (M.P.H.), Tufts University School of Medicine, Massachusetts
- 2013      Doctor of Philosophy (Ph.D.) in Epidemiology, Johns Hopkins Bloomberg School of Public Health, Maryland

**Professional Experience**

- 2004 – 2005      ER/ICU Veterinary Technician, Tufts University Foster Hospital for Small Animals, Massachusetts
- 2006 – 2007      Field Program Facilitator, Participatory Disease Surveillance and Response Project for Avian Influenza Control, United Nations Food and Agriculture Organization, Indonesia
- 2007 – 2008      Monitoring and Evaluation Field Coordinator, Participatory Disease Surveillance and Response Project for Avian Influenza Control, United Nations Food and Agriculture Organization, Indonesia
- 2008 – 2009      Relief Veterinarian, Banfield Pet Hospital, Maryland
- 2009 – 2010      Research Assistant, Hospital Epidemiology and Infection Control, Johns Hopkins Hospital, Maryland
- 2010 – 2013      Data Analyst, Pediatric Antibiotic Stewardship Program, Johns Hopkins University, Maryland
- 2014 – 2015      Instructor, Pulmonary and Critical Care Medicine, Johns Hopkins University, Maryland
- 2014 – 2015      Instructor, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health (joint appointment), Maryland
- 2015 – present      Assistant Professor, Pulmonary and Critical Care Medicine, Johns Hopkins University, Maryland
- 2015 – present      Assistant Professor, Epidemiology, Johns Hopkins University, Maryland

## RESEARCH ACTIVITIES

### Publications – Peer-Reviewed Research

1. Tamma PD, **Turnbull AE**, Milstone AM, Cosgrove SE, Valsamakis A, Budd A, Perl TM. Clinical outcomes of seasonal influenza and pandemic influenza A (H1N1) in pediatric inpatients. *BioMed Central Pediatrics*. 2010;10(1):72.
2. Tamma PD, **Turnbull AE**, Milstone AM, Lehmann CU, Sydnor ER, Cosgrove SE. Ventilator-associated tracheitis in children: Does antibiotic duration matter? *Clinical Infectious Diseases*. 2011;52(11):1324–1331.
3. **Turnbull AE**. Fear, Numbers, and Measles. *Health Communication*. 2011;26(8):775-776.
4. Tamma PD, **Turnbull AE**, Milstone AM, Hsu AJ, Carroll KC, Cosgrove SE. (2012) Does the piperacillin minimum inhibitory concentration for *Pseudomonas aeruginosa* influence clinical outcomes of children with pseudomonas bacteremia? *Clinical Infectious Diseases*. 2012;55(6):799-806.
5. Tamma PD, **Turnbull AE**, Harris AD, Milstone AM, Hsu AJ, Cosgrove SE. Less is More: Combination Antibiotic Therapy for the Treatment of Gram-Negative Bacteremia in Pediatric Patients. *Journal of the American Medical Association Pediatrics (JAMA Pediatr)*. 2013;167(10):1-8.
6. Tamma PD, Tan K, Nussenblatt VR, **Turnbull AE**, Carroll KC, Cosgrove SE. Can Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry (MALDI-TOF) Enhance Antimicrobial Stewardship Efforts in the Acute Care Setting? *Infection Control and Hospital Epidemiology*. 2013;34(9):990-995.
7. **Turnbull AE**, Ruhl AP, Lau BM, Mendez-Tellez PA, Shanholtz CB, Needham DM. (2014) Timing of Limitations in Life Support in Acute Lung Injury Patients: A Multisite Study. *Critical Care Medicine*. 2014;42(2):296-302.
8. **Turnbull AE**, Krall JR, Ruhl AP, Curtis JR, Halpern SD, Lau BM, Needham DM. A scenario-based, randomized trial of patient values and functional prognosis on intensivist intent to discuss withdrawing life support. *Critical Care Medicine*. 2014;42(6):1455-1462.
9. Sick AC, Tschudin-Sutter S, **Turnbull AE**, Weissman SJ, Tamma PD. Empiric Combination Therapy for Gram-Negative Bacteremia. *Pediatrics*. 2014;133(5):1148-1155.
10. **Turnbull AE**, Parker AM, Needham DM. Supporting small steps toward big innovations: the importance of rigorous pilot studies in critical care. *Journal of Critical Care*. 2014;29(4):669-670.
11. **Turnbull AE**, Ruhl AP, Needham DM. Timing of limitations of life support in the intensive care unit and sequential organ failure assessment (SOFA) scores: the authors reply. *Critical Care Medicine*. 2014;42(8):e596.
12. **Turnbull AE**, Lau BM, Ruhl AP, Mendez-Tellez PA, Shanholtz CB, Needham DM. Age and Decisions to Limit Life Support for Patients with Acute Lung Injury: A Prospective Cohort Study. *Critical Care*. 2014;18(3):R107.
13. Dinglas VD, Parker AM, Reddy DR, Colantuoni E, Zanni JM, **Turnbull AE**, Nelliott A, Ciesla N, Needham DM. A Quality Improvement Project Sustainably Decreased Time to Onset of Active Physical Therapy Intervention in Acute Lung Injury Patients. *Annals of the American Thoracic Society*. 2014;11(8):1230-1238.
14. **Turnbull AE**, Neufeld KJ, Needham DM. Contradictory findings on 1-year mortality following ICU delirium. *Critical Care*. 2015;19(29).
15. **Turnbull AE**, O'Connor CL, Lau B, Halpern SD, Needham DM. Allowing Physicians to Choose the Value of Compensation for Participation in a Web-Based Survey: Randomized Controlled Trial. *Journal of Medical Internet Research*. 2015;17(7):e189.
16. Hayes MH, **Turnbull AE**, Zaeh S, White DB, Bosslet GT, Wilson KC, Thomson CC. Responding to Requests for Potentially Inappropriate Treatments in Intensive Care Units. *Annals of the American Thoracic Society*. 2015;11(1):1697-1699.
17. Lane-Fall MB, Collard ML, **Turnbull AE**, Halpern SD, Shea JA. ICU Attending Handoff Practices: Results from a National Survey of Academic Intensivists. *Critical Care Medicine*. 2016;44(4):690-698.
18. Halwani MA, **Turnbull AE**, Harris M, Witter F, Perl TM. Post-discharge Surveillance for Infection Following Caesarian Section: A Prospective Cohort Study Comparing Methodologies. *American Journal of Infection Control*. 2016;44(4):445-447.
19. **Turnbull AE**, Hayes MM, Hashem MD, Needham DM. Interactive online module failed to improve sustained knowledge of the Maryland Orders for Life Sustaining Treatment (MOLST) form. *Annals of the American Thoracic Society*. 2016;13(6):926-932.

20. **Turnbull AE**, Rabiee A, Davis WE, Nasser MF, Venna VR, Lolitha R, Hopkins RO, Bienvenu OJ, Robinson KA, Needham DM. Outcome Measurement in ICU Survivorship Research from 1970-2013: A Scoping Review of 425 Publications. *Critical Care Medicine*. 2016;44(7):1267-1277.
21. Rabiee A, Nikayin S, Hashem MD, Huang M, Dinglas VD, Bienvenu OJ, **Turnbull AE**, Needham DM. Depressive symptoms after critical illness: a systematic review and meta-analysis. *Critical Care Medicine*. 2016;44(9):1744-1753.
22. **Turnbull AE**, Davis WE, Needham DM, White DB, Eakin MN. Intensivist-reported facilitators and barriers to discussing post-discharge outcomes with ICU surrogates: A qualitative study. *Annals of the American Thoracic Society*. 2016;13(9):1564-1552.
23. Wang R, Cosgrove SE, Tschudin-Sutter S, Han JH, **Turnbull AE**, Hsu AJ, Avdic E, Carroll KC, Tamma PD. Cefepim Therapy for Cefepime-Susceptible Extended-Spectrum Beta-Lactamase-Producing Enterobacteriaceae Bacteremia. *Open Forum Infectious Disease*. 2016; 3(3):ofw132.
24. **Turnbull AE**, Sahetya SK, Needham DM. Aligning Critical Care Interventions with Patient Goals: a Modified Delphi Study. *Heart & Lung: The Journal of Acute and Critical Care*. 2016; 45:517-524.
25. Robinson KA, Davis WE, Dinglas VD, Mendez-Tellez PA, Rabiee A, Sukrithan V, Yalamanchilli R, **Turnbull AE**, Needham DM. A systematic review finds limited data on measurement properties of instruments measuring outcomes in adult intensive care unit survivors. *J Clin Epidemiol*. 2016 Nov 16. pii.0895-4356(16)30626-6.
26. Nikayin S, Rabiee A, Hashem MD, Huang M, Bienvenu OJ, **Turnbull AE**, Needham DM. Anxiety Symptoms in Survivors of Critical Illness: A Systematic Review and Meta-Analysis. *General Hospital Psychiatry*. 2016; 43:23-29.
27. Hodgson CL, **Turnbull AE**, Iwashyna TJ, Parker AM, Davis WE, Bingham CO, Watts N, Finfer S, Needham DM. Clinician and Researcher Perspectives on Core Domains in Evaluating Post-Discharge Patient Outcomes after Acute Respiratory Failure. *Physical Therapy Journal*. 2017;97(2):168-174.
28. Eakin MN, Patel Y, Mendez-Tellez P, Dinglas VD, Needham DM, **Turnbull AE**. Patients' outcomes after acute respiratory failure: A qualitative study of survivors' experience using the PROMIS framework. *American Journal of Critical Care*. 2017; 26(6):456-465.
29. **Turnbull AE**, Sepulveda KA, Dinglas VD, Bingham CO, Needham, DM. Core Domains for Clinical Research in Acute Respiratory Failure Survivors: An International Modified Delphi Consensus Study. *Critical Care Medicine*. 2017;45(6):1001-1010.
30. Needham DM, Sepulveda KA, Dinglas VD, Chessare CM, Friedman LA, Bingham III CO, **Turnbull AE**. Core outcome measures for clinical research in acute respiratory failure survivors: an international modified Delphi consensus study. *Am J Respir Crit Care Med*. 2017;196(9):1122-1130.
31. **Turnbull AE**, Hashem MD, Rabiee A, To A, Chessare CM, Needham DM. Evaluation of a strategy for enrolling the families of critically ill patients in research using limited human resources. *PLoS ONE*. 2017;12(5):e0177741.
32. **Turnbull AE**, Hartog, CS. Goal-concordant care in the ICU: a conceptual framework for future research. *Intensive Care Medicine*. 2017; 43:1847-1849.
33. **Turnbull AE**, Chessare CM, Coffin, RK, Needham DM. A brief intervention for preparing ICU families to be proxies: A phase I study. *PLoS ONE*. 2017;12(10):e0185483.
34. Dinglas VD, Chessare CM, Davis WE, Parker A, Friedman LA, Colantuoni E, Bingham CO, **Turnbull AE**, Needham DM. Perspectives of survivors, families, and researchers on key outcomes for research in acute respiratory failure. *Thorax*. 2018; 73(1): 7-12.

#### **Publications – Publically available datasets**

1. **Turnbull, AE**, Hashem, Mohamed D, Rabiee A, To A, Chessare, C, Data associated with the *PLoS ONE* publication 'Evaluation of a strategy for enrolling the families of critically ill patients in research using limited human resources' by Turnbull et al. 2017; doi:10.7281/T1/FN9EH6 Johns Hopkins University Data Archive Dataverse, V1.
2. **Turnbull, Alison E.**; Chessare, Caroline M.; Coffin, Rachel; Needham, Dale M., 2018, "Data associated with the *PLoS ONE* publications "A Brief Intervention for Preparing ICU Families to be Proxies: A Phase I Study" and "More than one in three ICU proxies do not know their loved one's current code status," doi:10.7281/T1/4AJ8Y1, Johns Hopkins University Data Archive Dataverse

## Extramural Funding

### Current

- 4/1/2018 - 3/31/2023      *Understanding Response Shift in ARDS survivors*  
Grant #K01HL141637  
National Heart, Lung and Blood Institute  
\$857,064  
Role: PI
- 12/1/2014 - 11/30/2018      *Engaging Surrogates and Physicians to Ensure Concordant Critical Care*  
Grant #4626  
Gordon and Betty Moore Foundation - Early Career Investigator Award  
\$506,155  
Role: PI
- 10/1/2016 – 9/30/2018      *Development of an Automated and Sustainable Electronic Approach for Data Mining to Evaluate Clinical Outcomes of Patients with Bacterial Infections*  
Grant # HHSF223201610070C  
Food and Drug Administration  
\$118,615  
PI: Pranita Tamma, MD, MHS  
Role: Co-investigator 5% Effort in years 1 and 2
- Previous**
- 7/15/2013 – 3/31/2018      *R24 Improving Long-Term Outcomes Clinical Research for Acute Respiratory Failure*  
Grant # R24HL111895  
National Heart, Lung and Blood Institute  
\$3,395,137  
PI: Dale M. Needham, MD, PhD.  
Role: Co-investigator
- 10/1/2014 - 9/30/2016      *Establishing Clinically Relevant Antibiotic Breakpoint Interpretive Criteria*  
Grant # HHSF223201400096C  
Food and Drug Administration  
\$207,364  
PI: Pranita Tamma, MD, MHS  
Role: Statistician, 15% Effort in year 3
- 8/1/2014 – 12/31/2015      *Libretto Consortium*  
Gordon and Betty Moore Foundation  
\$342,500  
PI: Peter Pronovost  
Role: Co-investigator
- 10/01/2014 – 7/31/2015      *Enhancements to Project Emerge Prototype System*  
Grant # 3186.01  
Gordon and Betty Moore Foundation  
\$2,209,619  
PI: Peter Pronovost  
Role: Co-investigator
- 10/01/2010 – 09/30/2014      *ICU/Acute Care Multi-site Demonstration Project*

Grant # 3186.01  
 Gordon and Betty Moore Foundation  
 ICU/Acute Care Multi-site Demonstration Project  
 PI: Peter Pronovost  
 Role: Co-investigator

04/01/2010 – 03/31/2012      *Epidemiology and Biostatistics of Aging*  
 T32 AG000247  
 Institutional Training Grant from the National Institute on Aging  
 Program director: Karen Bandeen-Roche  
 Role: Postdoctoral fellow

## EDUCATIONAL ACTIVITIES

### Teaching

2010            Healthcare Epidemiology, Teaching Assistant, Johns Hopkins Bloomberg School of Public Health  
 2010 – 2011    Fundamental of Epidemiology, Teaching Assistant, Johns Hopkins Krieger School of Arts and  
                                 Sciences  
 2012            Data Analysis Workshop I & II, Teaching Assistant, Johns Hopkins Bloomberg School of Public  
                                 Health  
 2012            Math, Money, and the Mind: Controversies in Medical Decision Making, Dean's Teaching  
                                 Fellowship, Instructor, Johns Hopkins Krieger School of Arts and Sciences  
 2015            The Unbefriended Patient: Grand Rounds, Division of Pulmonary and Critical Care Medicine, Johns  
                                 Hopkins School of Medicine 12/2/2015  
 2015            Decisions about Patients who are Critically Ill or Dying for class 552.606.01: Ethics of Healthcare  
                                 Decision-Making: Theory and Practice; Lecturer, JHBSPPH 12/8/2015  
 2016            Interpreting Clinical Trials, Presentation for Johns Hopkins Pulmonary and Critical Care fellows,  
                                 Lecturer, 1/8/2016  
 2016            Primary palliative care in the MICU: Presentation for palliative care fellows, Lecturer, 4/22/2016  
 2016            End-of-life care in the ICU: Research challenges, ATS postgraduate course: PG4-Palliative Care in the  
                                 ICU: Clinical, ethical, and research challenges; Presentation, Lecturer, 5/13/2016  
 2016            Shared Decision-Making and Responding to Family Requests in the ICU, Current Practices & Future  
                                 Directions in Pulmonary, Critical Care and Sleep Medicine (Santa Fe, NM), Lecturer, 08/13/2016  
 2016            Patient Spirituality and the Receiving of Spiritual Care in the Hospital, Johns Hopkins Ethics for  
                                 Lunch Case Presentation and Discussion, 12/20/2016  
 2017            Helping Prepare ICU Families to Make Decisions: A Phase I study, Johns Hopkins Division of  
                                 Pulmonary and Critical Care Medicine Lung Research Conference, 01/19/2017  
 2017            Helping Prepare ICU Families to Make Decisions: Presentation for Johns Hopkins Palliative Care  
                                 Fellows, Lecturer, 01/20/2017  
 2017            Core Outcome Measures for Clinical Research in Acute Respiratory Failure Survivors: An  
                                 International Modified Delphi Consensus Study, ATS Critical Care Journal Club Presentation,  
                                 11/16/2017  
 2017            Decisions for Patients who are Critically Ill or Dying, Johns Hopkins Bloomberg School of Public  
                                 Health, class 700.623: Ethics and Decision-Making in Clinical Practice, Lecturer, 11/21/2017  
 2017            Responsible Peer Reviewing of RCTs, Division of Pulmonary and Critical Care Medicine, Johns  
                                 Hopkins School of Medicine 12/14/2017  
 2018            Surrogates, Agents, and Guardians: The Roles and Rights of ICU Families, Presentation for Johns  
                                 Hopkins Pulmonary and Critical Care Fellows, Lecturer, 1/18/2018  
 2018            Surrogates, Agents, and Guardians: The Roles and Rights of Families in the Hospital, Lecturer for  
                                 MedStar Health, Baltimore, MD 1/23/2018  
 2018            ICU Patient/family engagement: How will we know when we're doing it well? Presentation for Johns  
                                 Hopkins Palliative Care Fellows, Lecturer, 3/23/2018

## ORGANIZATIONAL ACTIVITIES

### Institutional Administrative Appointments

2011 – present	Member, Johns Hopkins University, Outcomes After Critical Illness & Surgery (OACIS) Research Group
2012 – 2015	Guest, Johns Hopkins Hospital, Hospital Ethics Committee
2015 – present	Member, Johns Hopkins Hospital, Hospital Ethics Committee
2012 – present	Inpatient Working Group, Johns Hopkins Hospital, Maryland Medical Orders for Life-Sustaining Treatment (MOLST)
2012 – 2016	Research Collaborator, Johns Hopkins University Armstrong Institute, Gordon & Betty Moore Foundation, Libretto project
2013 – 2016	Research Collaborator, Johns Hopkins University Armstrong Institute, Emerge Project

### Grant Review Activities

Health Improvement, Protection & Services Research Committee (The Scottish Government) – Review of Project Application for the Chief Medical Officer Directorate

### Journal Peer Review Activities

2012 – present	<i>Intensive Care Medicine</i> – reviewer
2018 – present	<i>Annals of the American Thoracic Society</i> – Editorial Board Member

## RECOGNITION

### Awards/Honors

2002	Magna Cum Laude, Carleton College
2002	Awarded Honors for Academic Excellence in Biology and Senior Thesis, Carleton College
2004 – 2005	The Agnes Varis Scholarship for students of public health, Tufts School of Veterinary Medicine
2008	Robert Dyar Memorial Award, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health
2010	Doctoral Seminar Award for Scholarship, Creativity, and Conversational Courage, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health
2010 – 2013	Johns Hopkins Sommer Scholar, Johns Hopkins Bloomberg School of Public Health
2012 – 2013	Dean's Teaching Fellowship for developing and teaching the undergraduate seminar <i>Math, Money, and the Mind: Current Controversies in Medical Decision Making</i> , Johns Hopkins University
2014	American Thoracic Society International Conference Abstract Scholarship, Assembly on Critical Care
2014	Inducted to Alpha Chapter of the Delta Omega Public Health Honor Society

### Invited Talks

3/13/14	<i>Solving Research Problems in Palliative Medicine: Official Resources and Creative Partnerships</i> , American Academy of Hospice and Palliative Medicine Annual Assembly, San Diego, CA, USA
4/16/14	<i>Family Participation in Treatment Decisions for our Sickest Patients</i> , Johns Hopkins Hospital Department of Social Work Grand Rounds, Johns Hopkins Hospital, Baltimore, MD USA
5/21/14	<i>What Should be the Role of Primary Care Physicians in ICU Decision Making?</i> , ATS International Conference, San Diego, CA, USA
5/13/16	<i>End-of-life care in the ICU: Research challenges</i> . ATS postgraduate course presentation, San Francisco, CA, USA
11/4/16	<i>Improving Long-Term Outcomes Research For Acute Respiratory Failure</i> . The United States Critical Illness and Injury Trials Group (USCIITG) annual meeting, Bethesda, MD, USA
2/28/17	<i>Core Domains for Clinical Research in Acute Respiratory Failure Survivors</i> . International Forum for Acute Care Trialists (InFACT) annual meeting, Whistler, BC, Canada

- 5/24/17 *Reaching International Consensus on Long-Term Outcomes Measures for Acute Respiratory Failure.* ATS International Conference, Washington, DC, USA
- 2/28/18 *Post-Discharge Outcomes and their Importance to Patients, Family Members, and Researchers.* 47<sup>th</sup> Critical Care Congress, San Antonio, TX, USA
- 5/11/18 *The Right Thing Measured Poorly: An Epidemiologist's View of Patient-Family Engagement in the ICU.* Division of Pulmonary, Critical Care, and Sleep Medicine Grand Rounds, Icahn School of Medicine at Mount Sinai, New York, NY, USA

## Abstracts

1. Tamma PD, Turnbull AE, Milstone AM, Cosgrove SE, Carlson A, Perl T. Clinical Outcomes of Seasonal Influenza and Pandemic Influenza A H1N1 in Pediatric Inpatients. Infectious Diseases Society of America Annual Assembly, Vancouver, Canada, 2010.
2. Tamma PD, Turnbull AE, Milstone AM, Lehmann CU, Sydnor EM, Cosgrove SE. Ventilator-associated tracheitis in children: Does antibiotic duration matter? Pediatric Grand Rounds, Johns Hopkins Medical Institution, 2011.
3. Halwani MA, Turnbull AE, Harris M, Maragakis LM, Witter F, Perl TM. Post-discharge Surveillance for Infection Following Caesarian Section: a Prospective Cohort Study Comparing Methodologies. Society for Healthcare Epidemiology of America (SHEA) Annual Scientific Meeting, Atlanta, USA, 2011.
4. Tamma PD, Turnbull AE, Milstone AM, Hsu AJ, Carroll KC, Cosgrove SE. Does the piperacillin minimum inhibitory concentration influence clinical outcomes of children with Pseudomonal bacteremia? Translational Science Meeting, Washington D.C., 2012.
5. Ruhl AP, Turnbull AE, Sevransky JE, Shanholtz CB, Pronovost PJ, Needham DM. Timing of Limitations In Life Support: A Prospective Evaluation in Acute Lung Injury Patients. American Thoracic Society Annual Conference, San Francisco, USA, 2012.
6. Turnbull AE, Ruhl AP, Lau BM, Mendez-Tellez PA, Shanholtz CB, Needham DM. The Role of Age And Comorbidity In Limitation Of Life Support For Patients With Acute Lung Injury. American Thoracic Society Annual Conference, Philadelphia, USA, 2013.
7. Turnbull AE, Ruhl AP, Lau BM, Mendez-Tellez PA, Shanholtz CB, Needham DM. Timing of Limitations in Life Support in Acute Lung Injury Patients: A Multi-Site Study. American Thoracic Society Annual Conference, Philadelphia, USA, 2013.
8. Turnbull AE, Krall JR, Ruhl AP, Curtis JR, Halpern SD, Lau BM, Needham DM. A scenario-based, randomized trial of patient values and functional prognosis on intensivist intent to discuss withdrawing life support. American Thoracic Society Annual Conference, San Diego, USA, 2014.
9. Parker A.M, Dinglas VD, Reddy DR, Colantuoni E, Zanni JM, Turnbull AE, Ciesla N, Needham DM. A Quality Improvement Intervention Sustainably Decreases Time to First Physical Therapy Intervention In Acute Respiratory Distress Syndrome Patients. American Thoracic Society Annual Conference, San Diego, USA, 2014.
10. Nasser MF, Venna VR, Rabiee A, Nallagangula A, Turnbull AE. Measures of physical activity limitations in ICU survivors: A systematic review. Third Annual Johns Hopkins Critical Care Rehabilitation Conference, Baltimore, USA, 2014.
11. Malhotra S, Turnbull AE, Mughanlinskaya N. Who's Who and What Do They Do? MedStar Health Research Symposium, USA, 2015.
12. Turnbull AE, Sahetya SK, Hashem MD, Needham DM. Expanding ICU stakeholder participation in the Delphi method: the Critical Care Aligned with Patient Goals project. American Thoracic Society Annual Conference, San Francisco, USA, 2016.
13. Zaeh S, Hayes MM, Turnbull AE. Barriers to House Staff Comfort Discussing MOLST Forms. American Thoracic Society Annual Conference, San Francisco, USA, 2016.
14. Zaeh S, Hayes MM, Rand CS, Turnbull AE. Why are Some House Staff Uncomfortable Discussing MOLST Forms with Patients? Partnering with Patients in Decision Making, Baltimore, USA, 2016.
15. Turnbull AE, Rabiee A, Hashem M, Shaear M, To A, Chessar C, Coffin R, Needham DM. Preparing Medical ICU Proxies to Partner in Shared Decision-Making: A Pilot Study, Partnering with Patients in Decision Making, Baltimore, USA, 2016.

16. Turnbull AE, Davis WE, Needham DM, White DB, Eakin MN. Intensivist-reported facilitators and barriers to discussing post-discharge outcomes with ICU surrogates: A qualitative study, Partnering with Patients in Decision Making, Baltimore, USA, 2016.
17. Turnbull AE, Chessare C, Coffin R, Needham DM. Preparing Families of Critically Ill Adults to Communicate with Clinicians: A Phase I Study. International Conference on Communication in Healthcare & Health Literacy Annual Research Conference, Baltimore, USA, 2017.
18. Turnbull AE, Chessare C, Coffin R, Needham DM. Preferred use of Life Support as Reported by Proxy Decision-Makers of Critically Ill Adult Patients. International Conference on Communication in Healthcare & Health Literacy Annual Research Conference, Baltimore, USA, 2017.
19. Teply ML, Singh AL, Sharma Basyal, P, Turnbull, AE. Intensivist Religiosity and Perceived Conflict During a Simulated Family Meeting. Annual Assembly American Academy of Hospice and Palliative Medicine. Boston, MA, USA, 2018.
20. Turnbull AE, Chessare CM, Coffin RK, Needham DM. A Brief Intervention for Preparing ICU Families to be Proxies: A Phase I Study. 47<sup>th</sup> Critical Care Congress, San Antonio, TX, USA, 2018.
21. Turnbull AE, Chessare CM, Coffin RK, Needham DM. More than one in three ICU proxies do not know their loved one's current code status. 47<sup>th</sup> Critical Care Congress, San Antonio, TX, USA, 2018.