### Curriculum Vitae Ilene L. Hollin, PhD

# PERSONAL DATA

#### **Address and Contact**

Health Services Administration and Policy Ritter Annex 537 1301 Cecil B Moore Ave Philadelphia, PA 19122 Phone: (215) 204-9164 E-mail: <u>ilene.hollin@temple.edu</u>

# **EDUCATION AND TRAINING**

Post-doctoral fellow	2018	University of Southern California and National Pharmaceutical Council	
PhD	2016	Johns Hopkins University	School of Public Health
MPH	2009	Columbia University	Field: Health Economics and Policy School of Public Health Effectiveness and Outcomes Research
BA	2005	Brandeis University	American studies; International studies

### **Doctoral Dissertation**

"Patient-centered drug development in rare diseases: the case of Duchenne muscular dystrophy."

## **PROFESSIONAL EXPERIENCE**

2018 – present	Assistant Professor, Health Services Administration and Policy, Temple University College of Public Health, Philadelphia, PA
2014 - 2016	Graduate Research Associate, Roger Lipitz Center for Integrated Health Care, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD Research Associate for Center Director (Karen Davis, PhD)
2012 – 2016	Graduate Research Associate, Stated Preference Study Team (Faculty Lead: John Bridges, PhD), Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
2012 - 2015	Program Specialist, Office of Planning, Evaluation, and Analytics, Office of the National Coordinator (ONC) for Health Information Technology, US Department of Health and Human Services, Washington, DC
2009 - 2011	Research Manager, Healthcare Innovation and Technology Lab, New York, NY
2008 – 2009	Research Assistant, Virtual Pediatric Intensive Care Unit, New York Presbyterian Hospital, Quality and Patient Safety, New York, NY
2006 - 2008	Coordinator, Child Advanced Center for Intervention and Services Research, New York State Psychiatric Institute/Columbia University, New York, NY

### **PROFESSIONAL ACTIVITIES**

#### **Society Membership**

AcademyHealth Society for Medical Decision Making International Society for Pharmacoeconomics and Outcomes Research International Association of Health Preference Research Academy of Managed Care Pharmacy Association for Public Policy and Analysis & Management

#### **Advisory Panel Participation**

Clinical Research Advisory Board, Cystic Fibrosis Foundation (2018 - present) Project Leadership Team Member and Workgroup Lead for C3N for cystic fibrosis (2014 – 2015) (PIs: Michael Seid and Peter Margolis), Cincinnati Children's Hospital Medical Center, The Collaborative Chronic Care Network (C3N)

### **EDITORIAL ACTIVITIES**

### **Journal Peer Review**

*The Patient,* 4 manuscripts *Value in Health,* 3 manuscripts

#### **Editorial Board Membership**

*The Patient* (2017 – Present)

#### **Other Peer Review Activities**

*Cost Effectiveness Analysis Registry*, Tufts Medical Center, Center for the Evaluation of Value and Risk in Health (2010- 2017)

### HONORS AND AWARDS

- 2015: Isaac and Catharine Hecht Scholarship, Central Scholarship
- 2015: Alison Snow Jones Memorial Prize, Bloomberg School of Public Health
- 2014: Charles D. Flagle Award, Bloomberg School of Public Health
- 2013: Lee Lusted Student Prize in Decision Psychology and Shared Decision Making, Society for Medical Decision Making
- 2013: Cross-Center Research Fellow, Johns Hopkins Center to Eliminate Cardiovascular Disparities and Centers for Population Health and Health Disparities
- 2011: Training Grant Fellow, Division of Health Sciences Informatics
- 2005: Magna Cum Laude, Brandeis University

## **PUBLICATIONS**

#### Journal Articles (Peer-Reviewed)

- Hollin IL, Peay H, Fischer R, Janssen E, Bridges John FP. Engaging patients and caregivers in prioritizing symptoms impacting quality of life for Duchenne and Becker Muscular Dystrophy. *Quality of Life Research*. 2018. Online first. <u>http://link.springer.com/article/10.1007/s11136-018-1891-7</u>.
- 2. Hong JC, Padula WV, **Hollin IL**, Hussain T, Dietz KB, Halbert JP, Marstellar JA, Cooper LA. Care management to reduce disparities and control hypertension in primary care: a cost-effectiveness analysis. *Medical Care*. 2018;56(2):179-185.
- 3. Hollin IL, Peay HL, Apkon SD, Bridges JFP. Patient-centered benefit-risk assessment in Duchenne muscular dystrophy. *Muscle and Nerve*. 2017:55(5): 626–634.
- 4. Lee J, Frey M, Frey P, Hollin IL, Wu AW. Seeing is engaging: Vlogs as a tool for patient engagement. *The Patient*. 2017;10(3):267-270.
- 5. **Hollin IL**, Young C, Hanson C, Bridges JF, Peay HL. Developing a patient-centered benefit-risk survey: a community-engaged approach. *Value in Health*. 2016;15(6)751-757.
- Cheung KL, Wijnen BFM, Hollin IL, Janssen EM, Bridges JF, Evers SMAA, Hiligsmann M. Using best-worst scaling to investigate preferences in health care: a systematic review. *Pharmacoeconomics*. 2016;34:1195-1209.
- 7. **Hollin IL**, Robinson K. Economics of cystic fibrosis: a scoping review and gaps analysis. *Applied Health Economics and Health Policy*. 2016;14(2):151-159.
- 8. Peay HL, **Hollin IL**, Bridges JF. Prioritizing parental worry associated with Duchenne muscular dystrophy using best-worst scaling. *Journal of Genetic Counseling*. 2015 Aug 21: 1-9.
- 9. Hollin IL, Peay HL, Bridges JF. Caregiver preferences for emerging Duchenne muscular dystrophy treatments: a comparison of best-worst scaling and conjoint analysis. *The Patient*. 2015;8(1):19-27.
- 10. Peay HL, **Hollin I**, Fischer R, Bridges JF. A community-engaged approach to quantifying caregiver preferences for the benefits and risks of emerging therapies for Duchenne muscular dystrophy. *Clinical Therapeutics*. 2014 May;36(5):624-37.
- Hollin I, Griffin M, Kachnowski S. How will we know if it's working? A multi-faceted approach to measuring usability of a specialty-specific EMR. *Health Informatics Journal*. 2012 Sept; 18(3):219-232.
- 12. Dhar M, Griffin M, Hollin I, Kachnowski S. Innovation spaces: Six strategies to inform healthcare. *The Healthcare Manager*. 2012;31(2):166-177.
- Seegert L, Hollin I, Kachnowski S. Information technology use in the patient-centered medical home: An assessment and discussion. *Journal of Healthcare Information Management*. 2011;25(2):40-45.

- 14. Vidair H, Reyes J, Shen S, Parrilla-Escobar M, Heleniak CM, **Hollin I**, Woodruff S, Turner JB, Rynn M. Screening parents bringing their children for psychiatric evaluation: Exploring parent and child psychopathology in the same clinic. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2011;50(5):441-450.
- 15. Wei J, **Hollin I**, Kachnowski S. A review of the use of mobile phone text messaging in a clinical and health behaviour intervention. *Journal of Telemedicine and Telecare*. 2011;17:41-48.
- Edwards A, Hollin I, Barry J, Kachnowski S. Barriers to cross institutional health information exchange: A literature review. *Journal of Healthcare Information Management*. 2010;24(3):22-34.

## **Working Papers**

- 1. **Hollin IL**, Romley J. Out-of-pocket burden for children with medical complexity in highdeductible health plans. Under Review.
- 2. Hollin IL, Ciarametaro M, Buelt L, Romley JA, Dubois RW. Stakeholder preferences and value assessment frameworks: is a one-size-fits-all approach patient-centered? Under Review.

Reports (Not Peer Reviewed)

- 1. Moon M, **Hollin IL**, Nicholas LH, Schoen C, Davis K. Serving older adults with complex care needs: a new benefit option for Medicare. The Commonwealth Fund, July 2015.
- 2. Heisey-Grove D, Hufstader M, **Hollin I**, Samy L, Shanks, K. Progress towards the meaningful use of electronic health records among critical access and small rural hospitals working with Regional Extension Centers. ONC Data Brief, no. 5. Washington, DC: Office of the National Coordinator for Health Information Technology, November 2012.

# PART II

### **CLASSROOM INSTRUCTION**

#### **Principal Instructor**

- 2017 Health Economics (online), Thomas Jefferson University Jefferson College of Population Health, Term 2. Enrollment: 11
- 2017 Health Economics (online), Thomas Jefferson University Jefferson College of Population Health, Term 1. Enrollment: 8

### **Other Significant Teaching**

- 2015 Introduction to Health Economics (Course Director: Douglas Hough, PhD), Johns Hopkins Bloomberg School of Public Health, Term 3: Lead Teaching Assistant
- 2014 Public Health Policy (Course Director: Gerard Anderson, PhD), Johns Hopkins Bloomberg School of Public Health, Term 5: Teaching Assistant
- 2014 Introduction to Health Economics (Course Director: Douglas Hough, PhD), Johns Hopkins Bloomberg School of Public Health, Term 3: Lead Teaching Assistant
- 2013 Research and Evaluation Methods in Health Policy (Course Directors: Daniel Webster, PhD and Renan Castillo, PhD), Johns Hopkins Bloomberg School of Public Health, Term 4: Teaching Assistant
- 2013 Health Economics III (Course Director: John F.P. Bridges, PhD), Johns Hopkins Bloomberg School of Public Health, Term 4: Teaching Assistant
- 2013 Economic Evaluation II (Course Directors: Dagna Constenla, PhD and Kevin Frick, PhD), Johns Hopkins Bloomberg School of Public Health, Term 3: Teaching Assistant
- 2013 Introduction to the US Healthcare System (Course Director: Bradley Herring, PhD), Johns Hopkins Bloomberg School of Public Health, Term 2: Teaching Assistant
- 2013 Introduction to Health Policy (Course Director: Gerard Anderson, PhD), Johns Hopkins Bloomberg School of Public Health, Term 1: Teaching Assistant
- 2012 Economic Evaluation I (Course Director: Kevin Frick, PhD), Johns Hopkins Bloomberg School of Public Health, Term 2: Teaching Assistant
- 2012 Introduction to Health Policy (Course Director: Gerard Anderson, PhD), Johns Hopkins Bloomberg School of Public Health, Term 1: Teaching Assistant

## **RESEARCH GRANT PARTICIPATION**

Economic Analysis of Long-Term Cystic Fibrosis Costs, Cystic Fibrosis Foundation 2013 – 2018

Principle investigator: John Bridges, PhD

Grant objective: The purpose of this grant is to predict long-term costs of modulator therapies. Role: Co-investigator; Award: \$58,600

Impact of healthcare costs, Cystic Fibrosis Foundation

2013

Principle investigator: Karen Robinson, PhD

Grant objective: The purpose of this grant is to review the economic literature on cystic fibrosis. Role: Research assistant; Award: \$7,465

# ACADEMIC SERVICE

Johns Hopkins Bloomberg School of Public Health Department of Health Policy and Management Honors and Awards Committee, 2013-2014 Public Health Practice Committee, 2012-2013

## PRESENTATIONS

### **Scientific Meetings**

### Oral Abstracts

1. **Hollin IL**, Romley J. Consumer-Directed Health Plans for Children with Medical Complexity. AcademyHealth Annual Research Meeting; 2018 June 24-26, Seattle, WA.

### Workshops

1. **Hollin IL**, Fronstin P, Reynolds C. Specialty benefit design at the intersection of high deductible health plans and health savings. AMCP Nexus; 2017 October 16-19, Dallas, TX.

### Issue Panels

- Hollin IL, Wamble D, Seidman J; Moderator: Ciarametaro M. Patient Perspective and Value Assessment: Easy to Identify the Need, Hard to Agree on the Solution. *ISPOR 23<sup>rd</sup> Annual International Meeting*; 2018 May 19-23, Baltimore, MD.
- Hollin IL, Sherman MS, Perfetto EM; Moderator: Ciarametaro M. The Value Assessment Debate: Pluralistic Approach or Does One Size Fit All? *ISPOR 22<sup>nd</sup> Annual International Meeting*; 2017 May 20-23, Boston, MA.

### Poster Abstracts

- Hollin IL, Peay H, Bridges JF. Pulmonary benefits of treating Duchenne muscular dystrophy: a regulatory benefit-risk analysis. Poster presentation at: ISPOR 21<sup>st</sup> Annual International Meeting; 2016 May 21-25; Washington, DC.
- Hollin IL, Camponeschi G, Paly VF, Mao T, Danoff S, Bridges JF. Developing a patientcentered instrument for treatment preferences in idiopathic pulmonary fibrosis. Poster presentation at: Pulmonary Fibrosis Foundation Summit 2015: From Bench to Bedside; 2015 Nov 12-14; Washington, DC.
- Hollin IL, Young C, Hanson C, Bridges JF, Peay H. Developing a stated-preferences instrument for Duchenne/Becker muscular dystrophy– A community-engaged research application. Poster presentation at: The 37<sup>th</sup> Annual Meeting of the Society for Medical Decision Making; 2015 Oct 18-21; St. Louis, MO.
- Hollin IL, Young C, Hanson C, Bridges JF, Peay H. Stated-preference survey development for muscular dystrophy–A community-engaged research application. Poster presentation at: The 3<sup>rd</sup> Meeting of the International Academy of Health Preference Research; 2015 Oct 18; St. Louis, MO.

- Hollin IL, Lee W, Patel V. Pioneer ACO Health IT Capabilities: Progress and performance toward Meaningful Use. Poster presentation at: 2015 AcademyHealth Annual Research Meeting; 2015 June 14-16; Minneapolis, MN.
- Hollin I, Peay H, Bridges JFP. Comparing best worst scaling and conjoint analysis to measure caregiver preferences for the benefits and risks of emerging treatments for Duchene muscular dystrophy. Poster presentation at: The 36<sup>th</sup> Annual Meeting of the Society for Medical Decision Making; 2014 Oct 18-22; Miami, FL.
- 7. **Hollin I**. Relationship between having a personal doctor and unmet need. Poster presentation at: 2014 AcademyHealth Annual Research Meeting; 2014 June 8-10; San Diego, CA.
- 8. **Hollin I**, Halliday J, Cooper LA. Cross-center cost analysis of practice-based interventions to reduce disparities in hypertension care: Work-in-Progress. Poster presentation at: CPHHD-TREC Joint Symposium; 2014 May 19-21; Marina del Rey, CA.
- Peay H, Hollin I, Sheffer H, Bridges JFP. Measuring treatment preferences of parents of children with Duchenne muscular dystrophy using best-worst scaling. Poster presentation at: The 63<sup>rd</sup> Annual Meeting of the American Society for Human Genetics; 2013 Oct 22-26; Boston, MA.
- Peay H, Hollin I, Sheffer H, Bridges JFP. Identifying and prioritizing parental concerns associated with Duchenne muscular dystrophy using best-worst scaling. Poster presentation at: The 35th Annual Meeting of the Society for Medical Decision Making; 2013 Oct 19-23; Baltimore, MD. *Presenting author and award recipient.*
- Peay H, Hollin I, Sheffer H, Bridges JFP. Identifying and prioritizing parental concerns for Duchenne muscular dystrophy using best-worst scaling. Poster presentation at: The 18th International World Muscular Society Congress; 2013 Oct 1-5; Asilomar, CA.
- 12. Griffin M, Tamrat T, **Hollin I**, Kachnowski S. Taking it to the streets: public interest and ideas for the use of mobile phones to improve medication continuation. Poster presentation at: mHealth Summit; 2011 Dec 5-7; Washington, DC.
- Tamrat T, Griffin M, Hollin I, Kachnowski S. Delivering mHealth: Consolidating critical findings for integrating mHealth into maternal and newborn health services. Oral presentation at: 139<sup>th</sup> American Public Health Association Annual Meeting; 2011 Oct 29- Nov 2; Washington, DC.
- 14. Hollin I, Bansal A, Kachnowski S, Pathak S. Using RFID-enabled blister packs for real-time adherence monitoring in outpatient schizophrenia care. Roundtable presentation at: 138<sup>th</sup> American Public Health Association Annual Meeting; 2010 Nov 6-10; Denver, CO.
- 15. Hollin I, Foster N, Hughes N, Kachnowski S, Griffin M. Assessing EHRs and health IT in outpatient HIV/AIDS clinics across four continents. Roundtable presentation at: 138<sup>th</sup> American Public Health Association Annual Meeting; 2010 Nov 6-10; Denver, CO.
- Hollin I, Wei J, Kachnowski S, Griffin M. Differentiation of text messaging meta-data for critical clinical intervention purposes from marketing purposes. Oral presentation at: 138<sup>th</sup> American Public Health Association Annual Meeting; 2010 Nov 6-10; Denver, CO.

- 17. Edwards A, Barry J, **Hollin I**, Kachnowski S. Barriers to the creation of standards for the facilitation of health information exchange. Poster session presented at: 138<sup>th</sup> American Public Health Association Annual Meeting; 2010 Nov 6-10; Denver, CO.
- 18. Pathak S, **Hollin I**, Edwards A, Wei J, Mathew J, Kachnowski S. Value and feasibility of wireless in medical telemetry: a device manufacturer's perspective. Presented at: Proceedings for the 7th International Conference on E-Governance; 2010 April 23; Bangalore, India.
- Vidair H, Parilla M, Reyes J, Shen S, Hollin I, Posner K, Kotler L, Rynn M. The effect of maternal anxiety and depression on children's internalizing problems: comparing parent and child reports. Poster session presented at: Annual Meeting of the Anxiety Disorders Association of America; 2008 Mar; Savannah, GA.
- 20. Reyes J, Vidair H, Parilla M, Hollin I, Posner K, Kotler L, Shen S, Rynn M. Assessing the relationship between parental distress and child anxiety and depression in a pediatric psychiatric clinic. Poster session presented at: Annual Meeting of the Association for Behavioral and Cognitive Therapies as part of the Child and School Related Issues Special Interest Group; 2007 Nov; Philadelphia, PA.
- 21. Parilla M, Vidair H, Reyes J, Hollin I, Posner K, Kotler L, Shen S, Rynn M. Evaluating maternal, paternal and child psychopathology in a psychiatric clinic. Poster session presented at: Annual Meeting of the American Association for Child and Adolescent Psychiatry; 2007 Oct; Boston, MA.
- 22. Parilla M, Vidair H, Reyes J, **Hollin I**, Posner K, Kotler L, Shen S, Rynn M. Relationship between parental and child psychopathology in a Child and Adolescent Psychiatric Evaluation Service (CAPES): Preliminary results. Poster presented at: Annual Meeting of the Post-Doctoral Research Fellows in the Research Training Program in Child and Adolescent Psychiatry, Columbia University/New York State Psychiatric Institute; 2007 Jun; New York, NY.

### **Invited Seminars and Lectures**

"Value in Healthcare: Opportunities, challenges and policy implications." - ECO 4200 Analysis of Healthcare Policy, Villanova University; March 30, 2017, Villanova, PA.

## **MEDIA COVERAGE**

Value Assessment Frameworks Should Represent a Spectrum of Patient Preferences, American Journal of Managed Care, September 8, 2017.

Dr Ilene Hollin: One-Size-Fits-All to Value Doesn't Work, American Journal of Managed Care, August 23, 2017.

Dr Ilene Hollin Outlines Differing Definitions of Value, American Journal of Managed Care, August 09, 2017.

Dr Ilene Hollin: Tailored Approach to Value Assessment Is Necessary, American Journal of Managed Care, May 23, 2017.

# ADDITIONAL INFORMATION

### **Research Statement**

Ilene L. Hollin, PhD is currently an Assistant Professor in the Department of Health Services Administration and Policy within the College of Public Health at Temple University. Her research explores health economics and health services research questions focused on: 1) patient-centered decision-making including patient and caregiver preferences and outcomes research; 2) the value of health technologies including pharmaceuticals and health information technology; and 3) innovative payment and delivery models. Dr. Hollin is especially interested in research that facilitates better healthcare for complex patient populations, such as those with rare diseases and children with special healthcare needs. She is also interested in bridging the gap between health research and policy analysis and is passionate about incorporating the patient perspective in all aspects of healthcare, research, and policy.

Dr. Hollin joined the HSAP faculty having completed a post-doctoral fellowship with the Leonard D. Schaeffer Center for Health Policy & Economics at the University of Southern California (USC) and The National Pharmaceutical Council (NPC). Dr. Hollin earned her PhD in Health Economics and Policy from the Johns Hopkins Bloomberg School of Public Health and her MPH in Effectiveness and Outcomes Research from the Columbia University Mailman School of Public Health.

### **Key Words**

Patient-centered decision-making, patient preferences, economic evaluation, value assessment, payment and delivery models, health outcomes, rare diseases, children with special healthcare needs