## **BIOGRAPHICAL SKETCH**

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NAME: NAYLOR, MARY

eRA COMMONS USER NAME (agency login): mnaylor

POSITION TITLE: Marian S. Ware Professor in Gerontology; Director, NewCourtland Center for Transitions

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing,

include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
	(if applicable)	MM/YYYY	
Villanova University, Villanova, PA	BSN	05/1971	Nursing
University of Pennsylvania, Philadelphia, PA	MSN	05/1973	Nursing
University of Pennsylvania, Philadelphia, PA	PHD	05/1982	Higher Education Administration

# A. Personal Statement

As an internationally recognized expert in the area of transitional care, and the chief architect of the Transitional Care Model (TCM), I have been involved in patient- and family caregiver centered, comparative effectiveness research for over two decades. I have led a multidisciplinary research team in the conceptualization, design and implementation of this longitudinal program of research. We have conducted multiple NIH funded clinical trials testing innovative solutions targeting the complex health and social needs of older adults and their family caregivers. The outcomes of this research include publications in leading peer reviewed journals and presentations at leading national and international professional meetings.

- 1. Naylor M, Brooten D, Jones R, Lavizzo-Mourey R, Mezey M, Pauly M. Comprehensive Discharge Planning for the Hospitalized Elderly: A Randomized Clinical Trial. Ann Intern Med. 1994 Jun 15; 120(12):999-1006. PubMed PMID: 8185149.
- 2. Naylor MD, Brooten D, Campbell R, Jacobsen BS, Mezey MD, Pauly MV, Schwartz JS. Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. JAMA. 1999 Feb 17;281(7):613-20. PubMed PMID: 10029122.
- 3. Naylor MD, Brooten DA, Campbell RL, Maislin G, McCauley KM, Schwartz JS. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. J Am Geriatr Soc. 2004 May;52(5):675-84. PubMed PMID: 15086645.
- 4. Naylor MD, Hirschman KB, Hanlon AL, Bowles KH, Bradway C, McCauley KM, Pauly MV. Comparison of evidence-based interventions on outcomes of hospitalized, cognitively impaired older adults. J Comp Eff Res. 2014 May;3(3):245-57. doi: 10.2217/cer.14.14. PubMed PMID: <a href="https://doi.org/10.24969152">24969152</a>; PubMed Central PMCID: PMC4171127.

## **B.** Positions and Honors

# **Positions and Employment**

1971 - 1976	Staff Nurse/Head Nurse, Bryn Mawr Hospital, Bryn Mawr, PA
1973 - 1976	Instructor, Department of Nursing, College of Allied Health Sciences, Thomas Jefferson University, Philadelphia, PA
1976 - 1979	Assistant Professor, Department of Nursing, Thomas Jefferson University, Philadelphia, PA
1979 - 1985	Chair and Associate Professor of Nursing, Department of Nursing, Thomas Jefferson University, Philadelphia, PA
1979 - 1985	Assistant Director of Nursing, Department of Nursing Service, Thomas Jefferson University Hospital, Philadelphia, PA

1985 - 1986	Chairman and Professor, Department of Nursing, College of Allied Health Sciences, Thomas Jefferson University, Philadelphia, PA
1985 - 1986	Associate Director of Nursing, Department of Nursing Service, Thomas Jefferson University Hospital, Philadelphia, PA
1985 - 1986	Professional Staff Member/W.K. Kellogg National Leadership Fellow, U.S. Senate Special Committee on Aging, Washington, DC
1986 - 1991	Assistant Professor, School of Nursing, University of Pennsylvania, Philadelphia, PA
1986 - 1998	Associate Dean and Director, Undergraduate Studies-, School of Nursing, University of Pennsylvania, Philadelphia, PA
1991 - 2000	Associate Professor, School of Nursing, University of Pennsylvania, Philadelphia, PA
1992 - 1993	Legislative Health Policy Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania, Philadelphia, PA
1993 -	Senior Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania, Philadelphia, PA
1995 - 2010	Faculty Director, Hillman Program, University of Pennsylvania, Philadelphia, PA
1997 - 1997	Visiting Scholar, Boston College School of Nursing, Chestnut Hill, MA
1997 - 2006	Associate Director, Center for Gerontologic Nursing Science, University of Pennsylvania, Philadelphia, PA
1998 - 2004	Co-Faculty Director, Living Independently For Elders , School of Nursing, University of Pennsylvania, Philadelphia, PA
2000 -	Professor, School of Nursing. University of Pennsylvania, Philadelphia, PA
2000 - 2002	Ralston Endowed Term Chair, School of Nursing. University of Pennsylvania, Philadelphia, PA
2002 -	Marian S. Ware Professor in Gerontology, School of Nursing. University of Pennsylvania, Philadelphia, PA
2002 - 2007	Director, RAND/Hartford Center for Interdisciplinary Geriatric Health Care Research, School of Nursing. University of Pennsylvania, Philadelphia, PA
2005 - 2015	National Program Director, Interdisciplinary Nursing Quality Research Initiative, Robert Wood Johnson Foundation (University of Pennsylvania), Philadelphia, PA
2006 -	Director, NewCourtland Center for Transitions and Health, School of Nursing. University of Pennsylvania, Philadelphia, PA

# Other Experience and Professional Memberships

1971 -	Member, American Nurses Association
1986 -	Fellow, American Academy of Nursing
1988 -	Member, Sigma Theta Tau
2005 -	Member, National Academy of Medicine (formerly, Institute of Medicine)
2010 - 2016	Member, Medicare Payment Advisory Commission
2015 -	Member, AHRQ National Advisory Council

# **Selected Honors & Awards**

2009	The Episteme Award, Baxter International Foundation, Sigma Theta Tau International
2009	Edward Henderson Award and State-of-the-Art Lecture, American Geriatrics Society
2010	Policy Luminary Award, American Association of Colleges of Nursing
2011	GE Healthcare-AACN Pioneering Spirit Award, American Association of Critical-Care Nurses
2012	Maxwell A. Pollack Award for Productive Aging, Gerontological Society of America
2012	President's Award, Friends of the National Institute of Nursing Research
2013	Anthony J. Jannetti Award for Extraordinary Contributions to Health Care, Academy of
	Medical-Surgical Nurses
2015	Presidential Chair, Visiting Scholar, University of California, San Francisco
2015	Doris Schwartz Gerontological Nursing Research Award, Gerontological Society of America
2016	Nurse Researcher Award, AONE Foundation
2016	Distinguished Investigator Award, AcademyHealth

# C. Contribution to Science

I have designed and executed a rigorous program of research to advocate for evidence-based changes in healthcare systems and policies. When major changes in health care financing in the mid-1980's led to shortened hospital stays for Medicare beneficiaries, and the healthcare delivery system had not adapted, more than 20% of hospitalized beneficiaries experienced poor outcomes and required rehospitalization. In response to this our research team designed an innovative care model—the Transitional Care Model—designed to address the unique needs of this complex, growing population. For the foreseeable future, chronic illness will be the number one global health challenge confronting societies. For more than two decades, I have led a multidisciplinary team of clinical scholars and health services researchers in generating, disseminating and translating knowledge designed to enhance the care and outcomes of chronically ill adults and their families. Based on the scientific rigor of this research and health and economic findings demonstrated by her team, the Coalition for Evidence-Based Policy has recognized the TCM as a "top-tiered" evidence-based approach that, if scaled nationally, could have a positive impact on the health and well-being of chronically ill adults and make wiser use of finite societal resources.

- a. Naylor MD, Feldman PH, Keating S, Koren MJ, Kurtzman ET, Maccoy MC, Krakauer R. Translating research into practice: transitional care for older adults. J Eval Clin Pract. 2009 Dec;15(6):1164-70. PubMed PMID: 20367721.
- b. Naylor MD, Aiken LH, Kurtzman ET, Olds DM, Hirschman KB. The care span: The importance of transitional care in achieving health reform. Health Aff (Millwood). 2011 Apr;30(4):746-54. PubMed PMID: 21471497.
- c. Zubritsky C, Abbott KM, Hirschman KB, Bowles KH, Foust JB, Naylor MD. Health-related Quality of Life: Expanding a Conceptual Framework to Include Older Adults Who Receive Long-term Services and Supports. Gerontologist, 2013;53(2):205-210. [Epub ahead of print: 2012 Aug 2] PMID: <u>22859435</u> PMCID: PMC3695648
- d. Naylor MD, Hirschman KB, O'Connor M, Barg R, Pauly MV. Engaging older adults in their transitional care: what more needs to be done?. J Comp Eff Res. 2013 Sep;2(5):457-68. PubMed PMID: 24236743.

As Director of the NewCourtland Center, focused on transitional care among older adults and their family caregivers with multiple chronic conditions, our Center provides in-depth knowledge of key transition points for at risk older adults, intensive research experiences with seasoned mentors, opportunities which facilitate the conduct of clinically relevant research, and interdisciplinary exposure to transitions in aging research. A few examples of our Center's collaborative effort among fellows and faculty members are noted below.

- a. Meghani S, Buck HG, Dickson V, Hammer, MJ, Rabelo-Silva E, Clark RA, Naylor MD. The Conceptualization and Measurement of Comorbidity: An Integrative Review of the Interprofessional Literature. *Nurs Res Pract*, 2013; 192782, doi:10.1155/2013/192782. PubMed PMID: 24187618
- b. Van Cleave JH, Trotta RL, Lysaght S, Steis MR, Lorenz RA, Naylor MD. Comorbidities in the Context of Care Transitions. ANS Adv Nurs Sci, 2013 April/June;36(2):E1-E13. doi: 10.1097/ANS.0b013e318290207d. PubMed PMID: 23644267
- c. Buck HG, Meghani S, Prvu Bettger JA, Byun E, Fachko MJ, O'Connor M, Tocchi C, Naylor M. The Use of Comorbidities Among Adults Experiencing Care Transitions: A Systematic Review and Evolutionary Analysis of Empirical Literature. Chronic Illness, 2012 Dec;8(4):278-295. doi: 10.1177/1742395312444741. PMID: 22514061
- d. Toles M, Moriarty H, Coburn K, Marcantonio S, Hanlon A, Mauer E, Fisher P, O'Connor M, Ulrich C, Naylor MD. Managing Chronic Illness: Nursing Contact and Participant Enrollment in a Medicare Care Coordination Demonstration Program. J Appl Gerontol, 2015 Aug 31. pii: 0733464815602115. [Epub ahead of print]. PubMed PMID: 26329160

I have also served on multiple national committees and workgroups to address the complexity of chronically ill older adults in the U.S., and the importance of providing appropriate care and services to this growing, vulnerable population.

- a. Working Group on Health Outcomes for Older Persons with Multiple Chronic Conditions. Universal health outcome measures for older persons with multiple chronic conditions. J Am Geriatr Soc. 2012 Dec;60(12):2333-41. PubMed PMID: 23194184; PubMed Central PMCID: PMC3521090.
- b. Trojanowski JQ, Arnold SE, Karlawish JH, Naylor M, Brunden KR, Lee VM. A model for improving the treatment and care of Alzheimer's disease patients through interdisciplinary research. Alzheimers Dement. 2012 Nov;8(6):564-73. doi: 10.1016/j.jalz.2011.08.005. PubMed PMID: 23102127; PubMed Central PMCID: PMC3643202.
- c. Naylor MD, Kurtzman ET, Grabowski DC, Harrington C, McClellan M, Reinhard SC. Unintended consequences of steps to cut readmissions and reform payment may threaten care of vulnerable older adults. Health Affairs, 2012 Jul;31(7):1623-32. doi: 10.1377/hlthaff.2012.0110. Epub 2012 Jun 20. PubMed PMID: 22722702
- d. Hurria A, Naylor M, Cohen H. (2013). Improving the Quality of Cancer Care in an Aging Population: Recommendations from an IOM Report. JAMA, 310(17):1795-1796. doi:10.1001/jama.2013.280416.

A listing of my indexed publications is available at:

http://www.ncbi.nlm.nih.gov/sites/myncbi/mary.naylor.1/bibliography/41159783/public/?sort=date&direction=descending

# D. Research Support Ongoing Research Support

2014/11/01-2019/10/31

R01CA196131-01A1, National Institutes of Health

Ulrich, Connie (PI)

Retention in Cancer Clinical Trials: Modeling Patient-Participants' Risk-Benefit

The goal of the study is to use innovative perceptual mapping methodology to identify risk-benefit assessments across sociodemographics among cancer clinical trial participants.

Role: Co-Investigator

2015/01/01-2017/12/31

NA, PCORI/University of Kentucky

Williams, Mark (PI)

Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence (ACHIEVE)

Project ACHIEVE represents an effort to combine the expertise of experienced patients and caregivers with national experts in care transitions. Our goals are to learn from patients and caregivers which transitional care outcomes matter most to them, rigorously evaluate current efforts at improving care transitions, and develop recommendations on best practices for patient-centered care transition interventions with guidance for scalability and large-scale dissemination. This multi-stakeholder research team includes representative patients, caregivers, multidisciplinary scholars and health services researchers who collectively seek to identify more patient-centered and effective strategies to meet the varying needs of diverse patients in heterogeneous contexts as they experience care transitions.

Role: CPI

2015/10/01-2016/12/31

Stevens Institute of Technology/Robert Wood Johnson Foundation

Rouse, William (PI)

The Use of Policy Simulation in Making Decisions to Implement the Transitional Care Model Guided by the TCMs logic model, the objective of this project is to determine whether the use of an innovative policy flight simulator accelerates positive decisions to implement the TCM in diverse healthcare organizations in the U.S.

Role: CPI

# **Completed Research Support**

2014/05/15-2016/06/30

71753, Robert Wood Johnson Foundation

Naylor, Mary (PI)

Local Adaptations of the Transitional Care Model

Guided by the TCM's logic model and informed by the perspectives of reflective practitioners (APNs and other clinical leaders), the aims of this study are to identify and describe local adaptations to the TCM, including the opportunities and barriers they address; classify the adaptations and their relationship to key components of the TCM; assess the prevalence of (a) opportunities and barriers described in Aim 1, and (b) types of adaptations; and, identify the multiple "perspectives" used by practitioners to assess TCM's value.

Role: PI

## 2011/08/04-2014/07/31

NA, Gordon & Betty Moore Foundation, the Jonas Center for Nursing Excellence, and the Alex & Rita Hillman Foundation

Naylor, Mary (PI)

Effects of Patient Centered Medical Home Plus Transitional Care for Complex Older Adults

This study compared the effects of the PCMH only to a new intervention derived from combining the PCMH and TCM. Findings from this effort will position participating partners for a larger scale effort and contribute to plan for sustaining the more effective and efficient intervention.

Role: PI

### 2009/05/01-2014/06/30

NA, National Philanthropic Trust/Marian S. Ware Alzheimer Program, University of Pennsylvania Naylor, Mary (PI)

Care Coordination Component Program

The Continuity of Care component of the Marian S. Ware Alzheimer's program focused on advancing the science to improve the care and outcomes of cognitively impaired older adults and their family caregivers throughout vulnerable transitions, and translating research findings to impact clinical standards and health policy impact on behalf of this population.

Role: PI

#### 2006/09/01-2012/05/31

R01 AG025524-05, National Institute on Aging (NIA)

Naylor, Mary D (PI)

Health related quality of life: Elders in long-term care

This study examined the natural history of changes in each of the multiple domains of HRQoL (i.e., biological and physiological factors, symptom status, functional status, emotional status, behavioral status among cognitively impaired only, general health perceptions and perceived overall quality of life (QoL) over a two-year period.

Role: PI

# 2005/09/15-2011/08/31

R01 AG023116-05. National Institute on Aging (NIA)

Naylor, Mary D (PI)

Hospital to Home: Cognitively Impaired Elders/Caregivers

This study is compared across three hospital sites the effects on health and cost outcomes observed by the following three interventions, each designed to enhance adaptation and improve outcomes of hospitalized cognitively impaired elders and their family caregivers.

Role: PI