

Supplemental Digital Appendix 1

Data Extraction Form Questions

Authors (List all in order of appearance: First, second, third author, etc.):

Title of article:

Year:

Manuscript type:

1. Please summarize the main purpose of the study or innovation (using your own words, or quoting from the article. If you are quoting, please use quotation marks and indicate the page you are quoting from).
2. Please briefly describe the design of the study or innovation (using your own words, or quoting from the article. If you are quoting, please use quotation marks and indicate the page you are quoting from).
3. The study conducted was (please choose all that apply): Exploratory, Descriptive, Observational, Experimental, Quasi-experimental
4. The approach to data collection was (please check all that apply): Qualitative, Quantitative, Mixed Methods
5. Please summarize what kind of data was collected (e.g., surveys, evaluations, interviews, etc.).
6. The setting of the study was (please check all that apply): Inpatient, Outpatient, Continuity Clinic, Longitudinal Integrated Clerkship
7. Please provide a brief description of the study setting above.
8. The population included in the study was (please check all that apply): Attending physicians, Resident/Trainee Physicians, Medical Students
9. Please provide a brief description of the study population.
10. Describe the approach to data analysis.
11. Were any theories applied to the data analysis? If so, which theories?
12. Please describe the primary findings or conclusions presented in the manuscript as they relate to patient ownership. Please summarize and/or copy & paste statements from the manuscript (use quotation marks and indicate page numbers for source quotes as appropriate).
13. Please describe any other main findings or conclusions of the manuscript. Please summarize and/or copy & paste statements from the manuscript (please use quotation marks and indicate page numbers for source quotes as appropriate).
14. Was patient ownership the primary focus of the article?
15. Did the manuscript define patient ownership? If so, summarize and/or copy & paste statements from the manuscript (please use quotation marks and indicate page numbers for source quotes as appropriate).
16. Did the manuscript discuss a concept/term closely related to patient ownership? If so, summarize and/or copy & paste statements from the manuscript (please use quotation marks, and indicate page numbers for source quotes as appropriate). What was the term? How was it defined? How does it relate to patient ownership?

17. Did the manuscript discuss any facilitators (e.g., attitudes, behaviors, etc) related to patient ownership? If so, summarize and/or copy & paste statements from the manuscript (please use quotation marks and indicate page numbers for source quotes as appropriate).
18. Did the manuscript discuss any barriers (e.g., attitudes, behaviors, etc) related to patient ownership? If so, summarize and/or copy & paste statements from the manuscript (please use quotation marks, and indicate page numbers for source quotes as appropriate).

Supplemental Digital Appendix 2

Studies Included in Scoping Review

First Author	Main Topic	Study Type	Study Design	Population	Setting	Definition	Influencing Factors
Antiel (2016)	Describing how DHRs affect ownership and can create a moral dilemma for residents who feel drawn to stay longer to care for patients	Commentary	N/a	Resident physicians	Residency programs (in general)	Yes: direct	Yes: DHRs, sense of responsibility
Arora (2012)	Discussing the problems with holding onto older views of professionalism and need to adopt a new professionalism that recognizes resident limitations	Commentary	N/a	Resident physicians	Residency programs (in general)	No	Yes: DHRs, sense of responsibility, team-based care
Bates (2013)	Examining how longitudinal clerkship placements for medical students influence their perceptions of assessment and feedback	Original research paper	Qualitative; interviews	Medical students	Two Canadian medical schools	No	Yes: outpatient clinic scheduling
Bates (2016)	Exploring a scheduling model that separates inpatient and outpatient responsibilities	Educational innovation report	Quantitative; Surveys	Resident physicians	IM residency program	No	Yes: outpatient clinic scheduling

Bernabeo (2011)	Examining the effects of frequent rotation changes (every 2-4 weeks) on residents	Original research paper	Qualitative; focus groups	Attending and resident physicians	Three IM residency programs	No	Yes: outpatient clinic scheduling
Biderman (1996)	Determining whether training and/or practice setting influence role boundaries of family physicians	Original research paper	Quantitative; surveys	Attending and resident physicians	Five Israeli FM departments	No	Yes: sense of responsibility
Bogetz (2014)	Identifying challenges and ways to improve training residents to care for children of medical complexity	Original research paper	Qualitative; surveys and focus groups	Attending and resident physicians	Pediatric Educational Excellence Across the Continuum conference attendees	No	Yes: autonomy, faculty expectations and role modeling
Bowen (2015)	Exploring the connection between continuity of care and education within the Primary Care Medical Home model	Commentary	Thematic literature review	Resident physicians	Residency continuity clinics (in general)	No	Yes: outpatient clinic scheduling
Bowen (2017)	Exploring physicians' motivations to follow up on patients after care transitions	Original research paper	Qualitative; interviews	Attending and resident physicians	IM residency program and affiliated hospital	No	Yes: sense of responsibility
Cantillon (2008)	Determining which factors in a general practice environment motivate effective learning for interns	Original research paper	Qualitative; interviews	Resident physicians	Inpatient surgery and outpatient general practice settings in Ireland	No	Yes: autonomy

Caplan (2008)	Commenting on the impact of DHRs on consultation psychiatry	Commentary	N/a	Resident and attending physicians	Academic hospitals (in general)	No	Yes: DHRs
Carney (2016)	Describing the importance of and challenges in measuring resident continuity of care	Original research paper	Qualitative; literature review, interviews, field notes	Resident and attending physicians	FM residency programs	No	Yes: outpatient clinic scheduling
Chaudhry (2015)	Determining the effects of adding a primary resident field into the electronic medical record in a continuity clinic	Original research paper	Mixed methods; surveys, chart review	Attending and resident physicians	Pediatric residency program	No	Yes: outpatient clinic scheduling
Clarke (2016)	Discussing the role of generational differences in shaping resident views of patient ownership	Commentary	N/a	Resident physicians	N/a	Yes: indirect	Yes: sense of responsibility
Colbert (2012)	Describing a resident-led Continuity Clinic Ownership in Resident Education that addressed clinic practice management and quality improvement	Educational innovation report	Qualitative; focus groups	Resident physicians	IM residency program	No	Yes: autonomy
Conn (2016)	Exploring communication and culture in surgical ICUs	Original research paper	Qualitative; ethnographic measures including observation, review of email and text messages, interviews	Attending and resident physicians	Seven ICUs within a large academic medical center	Yes: indirect	Yes: team-based care

Conti (2015)	Discussing how changes in the work and training environment have impacted patient ownership and patient care	Commentary	N/a	Resident and fellow physicians	N/a	Yes: direct	Yes: DHRs, sense of responsibility, faculty expectations and role modeling
Coverdill (2016)	Examining how often and why surgery residents break DHRs, as well as how they manage care transitions	Original research paper	Mixed methods; surveys, follow-up interviews	Resident physicians	13 surgical residency programs	Yes: direct and indirect	Yes: sense of responsibility, team-based care
Cowley (2017)	Defining patient ownership, identifying behaviors that exemplify ownership, and determining whether these differ between residents and faculty and between IM and psychiatry	Original research paper	Qualitative; survey	Attending and resident physicians	Two psychiatry and one IM residency program	Yes: indirect	Yes: autonomy
Desai (2013)	Examining the effects of 2011 ACGME DHRs on resident sleep, education, continuity, and quality of care delivery	Original research paper	Quantitative; sleep duration, patient outcome measures, continuity of care measures, resident satisfaction surveys	Resident physicians	IM residency program	No	Yes: DHRs
Drolet (2013)	Determining pediatric program director perceptions of 2011 ACGME DHRs	Original research paper	Quantitative; surveys	Attending physicians (residency program directors)	Pediatric residency programs	No	Yes: DHRs

Dubov (2016)	Discussing the impact of DHRs on decision ownership among residents	Commentary	N/a	Resident physicians	N/a	Yes: direct	Yes: DHRs, sense of responsibility, autonomy
Francis (2014)	Assessing resident satisfaction with different continuity clinic models	Original research paper	Quantitative; surveys	Resident physicians	IM residents from 12 programs	No	Yes: outpatient clinic scheduling
Freund (2015)	Describing skills, education, and roles of health professionals in primary care teams	Commentary	N/a	N/a	Primary care teams (in general)	No	Yes: faculty expectations and role modeling and team-based care
Galandiuk (2013)	Commenting on conflict between surgeons and intensivists over care decisions, particularly after bad surgical outcomes	Commentary	N/a	Attending physicians	ICUs (in general)	No	Yes: team-based care
Garment (2013)	Describing and evaluating the effects of a structured clinic transfer of care	Original research paper	Quantitative; survey and chart review	Resident physicians	Three IM ambulatory clinics	No	Yes: outpatient clinic scheduling, patient handoffs
Greenzang (2015)	Sharing recommendations to foster accountability and responsibility among residents	Commentary	N/a	Resident physicians	N/a	Yes: indirect	Yes: DHRs, autonomy, faculty expectations and role modeling
Griner (2010)	Determining attending surgeon perceptions of resident attitudes and perceptions before and after 80 hour/week DHRs	Original research paper	Quantitative; surveys	Attending physicians	Surgery departments at six academic medical centers	No	Yes: DHRs

Haas (2015)	Describing communication between intensivists and surgeons, including enablers and barriers to communication	Original research paper	Qualitative; interviews	Attending and resident physicians	Four academic hospitals	No	Yes: team-based care
Heist (2014)	Determining the impact of two ambulatory clinic scheduling models (traditional vs a 4+1 week block) on continuity of care	Original research paper	Quantitative; health records review	Resident physicians	IM residency program	No	Yes: outpatient clinic scheduling
Hinchey (2009)	Examining perceptions of a redesign of the 2 nd -year of residency in an IM program	Original research paper	Qualitative; interviews	Resident physicians	IM residency program	Yes: direct and indirect	Yes: autonomy
Hom (2016)	Assessing resident compliance with outpatient clinic follow-up tasks during different rotations	Original research paper	Quantitative; Measuring electronic health record log-ins	Resident physicians	IM residency program	Yes: indirect	Yes: outpatient clinic scheduling
Horwitz (2010)	Investigating training and competence of residents in developmental and behavioral pediatrics, and whether these factors are associated with perceived responsibility for treating mental health problems	Original research paper	Quantitative; survey	Resident physicians	All residents completing the American Academy of Pediatrics 2007 Graduating Residents Survey	No	Yes: sense of efficacy

Hoskote (2014)	Assessing resident perceptions of 2011 ACGME DHRs on patient care	Original research paper	Quantitative; surveys	Resident physicians	IM residency program	No	Yes: DHRs
Jain (2007)	Commenting on the how resident training shapes patient ownership attitudes, particularly for patients followed by a different primary care provider and patients not fluent in English	Commentary	N/a	Attending and resident physicians	N/a	No	Yes: sense of responsibility, faculty expectations and role modeling
Jantea (2017)	Assessing perceptions and outcomes of a 50/50 block schedule that separated inpatient and outpatient responsibilities	Original research paper	Quantitative; surveys, measures of continuity of care and intervisit task completion, log-ins to EMR, and patient clinical outcomes	Resident and attending physicians	IM residency program continuity clinics	Yes: indirect	Yes: outpatient clinic scheduling
Kempenich (2015)	Identifying barriers to resident autonomy as viewed by residents, attendings, hospital administration and the general public	Original research paper	Quantitative; surveys	Attending and resident physicians	Three surgical residency programs	No	Yes: autonomy

Kernan (1997)	Identifying site accommodations and preceptor behaviors that promoted learning among medical students	Original research paper	Quantitative; surveys	Medical students	Outpatient internal medicine clinic within a 3 rd -year medical student clerkship	No	Yes: autonomy
Kolade (2014)	Assessing resident and faculty perceptions of continuity clinic patient handoffs	Original research paper	Quantitative; surveys	Attending and resident physicians	IM, FM, and pediatrics programs at single academic medical center	No	Yes: patient handoffs
Kontos (2008)	Identifying difficulties consultation psychiatrists face related to patient ownership	Commentary	N/a	Attending and resident physicians	N/a	Yes: direct and indirect	Yes: team-based care
Latessa (2016)	Identifying effective teaching practices within longitudinal integrated clerkships	Original research paper	Qualitative; interviews	Medical students	Medical school longitudinal integrated clerkship program	Yes: direct and indirect	Yes: autonomy
Lee (2012)	Assessing resident perceptions of 16-hour shift DHRs	Original research paper	Quantitative; surveys	Resident physicians	All U.S. surgical residency programs	No	Yes: DHRs
Lee A (2017)	Examining resident and preceptor perceptions and experiences of interpersonal continuity	Original research paper	Mixed methods; chart review, interviews	Resident and attending physicians	FM residency program	No	Yes: faculty expectations and role modeling, team-based care

Lee SH (2017)	Examining barriers and solutions for effective sign-out processes among residents	Original research paper	Qualitative; interviews, focus groups, observations	Resident physicians	IM department in Singapore	No	Yes: DHRs, sense of responsibility, patient handoffs
Lin (2006)	Exploring resident perceptions of impacts of DHRs on patient care, education, and job satisfaction	Original research paper	Qualitative; focus groups	Resident physicians	IM residency program	No	Yes: DHRs
Lockman (2017)	Defining professionalism within pediatric anesthesiology	Original research paper	Qualitative; focus groups	Attending physicians	Large academic medical center	Yes: indirect	No
Macauley (2012)	Discussing physician responsibilities surrounding patient handoffs	Commentary	N/a	Attending physicians	N/a	No	Yes: patient handoffs
Mattar (2013)	Querying surgical program directors about resident preparedness for entering fellowship	Original research paper	Mixed methods; qualitative and quantitative survey	Resident physicians	General surgery subspecialty fellowship programs (in general)	Yes: direct and indirect	No
Matthew (2016)	Assessing resident perceptions of a reduced duty hour schedule with night float system	Original research paper	Qualitative; focus groups	Resident physicians	IM residency program	No	Yes: DHRs
McLaren (2013)	Provide a behavioral definition of patient ownership	Original research paper	Qualitative; surveys	Attending and resident physicians	Psychiatry residency programs in general)	Yes: indirect	Yes: faculty expectations and role modeling
Olive (1985)	Examining physician and nurse attitudes toward patient education	Original research paper	Quantitative; surveys	Attending physicians	Academic women's hospital	No	Yes: team-based care

Park (2007)	Exploring surgical resident and attending perceptions of responsibility	Original research paper	Qualitative; interviews	Attending and resident physicians	Surgery departments at two academic medical centers	No	Yes: DHRs, sense of responsibility, team-based care
Peccoralo (2012)	Assessing resident's satisfaction with continuity clinic and its relation to career choice	Original research paper	Quantitative; surveys	Resident physicians	Three IM residency programs	Yes: indirect	No
Pellegrini (2017)	Discussing the impact of DHRs on orthopedic residency training	Commentary	N/a	Resident physicians	Orthopedic residency programs (in general)	Yes: indirect	Yes: DHRs
Phillips (2017)	Assessing end-of-year clinic handoffs in IM residency programs	Original research paper	Quantitative; surveys	Attending physicians	IM residency programs	No	Yes: patient handoffs
Pincavage (2012)	Assessing resident perspectives and patient outcomes after a year-end clinic handoff	Original research paper	Quantitative; surveys, chart reviews	Resident physicians	IM residency program	No	Yes: patient handoffs
Pincavage (2013)	Evaluating results of an enhanced clinic handoff of patient safety, continuity, education, and ownership	Original research paper	Quantitative; surveys, chart reviews	Resident physicians	IM residency program	No	Yes: outpatient clinic scheduling, patient handoffs
Pinzur (2011)	Discussing implications of levels of attending supervision and graduated responsibility within residency training	Commentary	N/a	Attending and resident physicians	Orthopedic residency programs (in general)	No	Yes: autonomy

Politi (2011)	Discussing challenges to interprofessional decision support and possible solutions	Commentary	N/a	N/a	N/a	No	Yes: team-based care
Rabjohn (2008)	Commenting on the effects of DHRs on psychiatry training	Commentary	N/a	Resident physicians	Psychiatry residency programs (in general)	No	Yes: DHRs
Ratanawongsa (2006)	Exploring resident perspectives on professionalism, including the impact of DHRs	Original research paper	Mixed methods; qualitative and quantitative survey	Resident physicians	IM, neurology, and FM departments at three medical centers	No	Yes: DHRs
Rose (2011)	Discussing determinants of interprofessional collaboration in the ICU and interventions to promote teamwork	Commentary	N/a	N/a	Intensive care units (in general)	No	Yes: team-based care
Saba (2014)	Exploring perceptions and impact of a telephone follow-up curriculum for medical students	Original research paper	Mixed methods; surveys, focus groups, clinical performance examination	Medical students	Third-year medical students in longitudinal clerkships	No	Yes: outpatient clinic scheduling, sense of responsibility
Sanfey (2011)	Comparing surgical resident and program director perceptions on service and education in residency	Original research paper	Quantitative; surveys	Resident and attending physicians	All U.S. general surgery residency programs	No	Yes: faculty expectations and role modeling, team-based care
Schuh (2011)	Determining feasibility of 2008 IOM recommended DHRs	Original research paper	Quantitative; surveys, activity logs	Resident physicians	Three neurology residency programs	No	Yes: DHRs

Schulman (1989)	Exploring transfer of patient care at the end of psychiatry residency	Original research paper	Qualitative; surveys	Resident and attending physicians	Psychiatry residency program	No	Yes: outpatient clinic scheduling
Schumacher (2012)	Addressing the quality, in addition to the quantity, of duty hours in residency	Commentary	N/a	Resident physicians	Residency programs (in general)	No	Yes: outpatient clinic scheduling
Soeprono (2017)	Soliciting perspectives on practical methods to enhance patient ownership among residents	Original research paper	Qualitative; surveys	Attending and resident physicians	Psychiatry residency program	Yes: indirect	Yes: outpatient clinic scheduling, sense of responsibility, sense of efficacy, autonomy, faculty expectations and role modeling
Soones (2015)	Identifying factors impacting team-based care and the effect of care teams resident education	Original research paper	Qualitative; interviews, focus groups	Resident physicians	Three IM continuity clinics	No	Yes: sense of responsibility
Stack (2016)	Commenting on a paper examining resident perceptions of responsibility after patient discharge (Young 2016)	Commentary on original research paper	N/a	Resident physicians	IM residency program	No	Yes: sense of responsibility, team-based care

Stevens (2014)	Commenting on the effects of adding longitudinal continuity experiences in medical school	Commentary (in addition to describing their own outcomes in implementing a longitudinal continuity clerkship experience)	N/a for commentary; brief quantitative description of their students' exam scores and perceptions	Medical students	Longitudinal clerkship settings in medical school (in general)	No	Yes: outpatient clinic scheduling
Stroud (2012)	Determining attending, resident, and student perceptions of a new call structure	Original research paper	Qualitative; focus groups	Attending physicians, resident physicians, and medical students	Two IM residency programs	No	Yes: DHRs
Sun (2016)	Exploring perceptions of 16-hour shift DHRs with night float system	Original research paper	Qualitative; interviews	Attending and resident physicians	IM residency program	Yes: direct	Yes: DHRs
Szufflita (2015)	Personal reflection on patient ownership demonstrated by physicians caring for the author's father	Commentary	N/a	N/a	N/a	Yes: indirect	No
Temam (2014)	Determining factors that affect entrustment decisions and barriers to autonomy in surgical residency programs	Original research paper	Mixed methods: qualitative and quantitative survey questions	Attending physicians	Seven general surgical residency programs	No	Yes: DHRs, autonomy
Van Eaton (2005)	Discussing how to reconcile professionalism with DHRs	Commentary	N/a	Resident physicians	Residency programs (in general)	Yes: direct	Yes: DHRs, sense of responsibility, team-based care

Walters (2012)	Describing literature on outcomes for longitudinal integrated clerkships	Literature review	N/a	Medical students	Longitudinal integrated clerkships in medical school (in general)	No	Yes: outpatient continuity clinic scheduling
Wamsley (2009)	Describing longitudinal outpatient continuity for medical students and its effect on learning	Original research paper	Qualitative; surveys, interviews	Medical students	Medical school 3 rd -year clerkships	No	Yes: autonomy
Wieland (2013)	Describing resident perspectives on factors that affect continuity within continuity clinics	Original research paper	Qualitative; facilitative small group discussions	Resident physicians	IM residency program	No	Yes: team-based care
Wyatt (2016)	Discussing student, resident, and attending physician concepts of patient ownership and suggesting a new way to conceptualize it	Commentary on original research abstract	Qualitative; interviews, focus groups, observations	Attending physicians, resident physicians, and medical students	IM clerkship	Yes: direct and indirect	No
Yedida (1993)	Examining resident perceptions of responsibility for patient care, quality of care, and education following new DHRs	Original research paper	Qualitative; interviews	Resident physicians	IM residency program	No	Yes: DHRs, sense of responsibility
Young (2016)	Examining resident perceptions of responsibility after patient discharge	Original research paper	Quantitative; surveys	Resident physicians	Nine IM residency programs	No	Yes: sense of responsibility, sense of efficacy, faculty expectations and role modeling

Supplemental digital content for Kiger ME, Meyer HS, Hammond C, et al. Whose Patient Is This? A Scoping Review of Patient Ownership. Acad Med. 2019(11 Suppl).

Abbreviations: ACGME indicates Accreditation Council for Graduate Medical Education; DHRs, duty-hour restrictions; FM, family medicine; ICU, intensive care unit; IM, internal medicine; IOM, Institute of Medicine.