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The Advocacy Portfolio: A Standardized Tool for Documenting Physician Advocacy

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The authors have informed the journal that they agree that Abby L. Nerlinger and Anita N. Shah have both completed the intellectual and other work typical of the first author.

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Abstract

Recent changes in health care delivery systems and in medical training have primed academia for a paradigm shift, with strengthened support for an expanded definition of scholarship. Physicians who consider advocacy to be relevant to their scholarly endeavors need a standardized format to display activities and measure the value of health outcomes to which their work can be attributed. Similar to the Educator Portfolio, the authors here propose the Advocacy Portfolio (AP) to document a scholarly approach to advocacy.

Despite common challenges faced in the arguments for both education and advocacy to be viewed as scholarship, the authors highlight inherent differences between the two fields. Based on prior literature, the authors propose a broad yet comprehensive set of domains to categorize advocacy activities, including advocacy engagement, knowledge dissemination, community outreach, advocacy teaching/mentoring, and advocacy leadership/administration. Documenting quality, quantity, and a scholarly approach to advocacy within each domain is the first of many steps to establish congruence between advocacy and scholarship for physicians utilizing the AP format.

This standardized format can be applied in a variety of settings, from medical training to academic promotion. Such documentation will encourage institutional buy-in by aligning measured outcomes with institutional missions. The AP will also provide physician advocates with a method to display the impact of advocacy projects on health outcomes for patients and populations. Future challenges to broad application include establishing institutional support and developing consensus regarding criteria by which to evaluate the contributions of advocacy activities to scholarship.

Physician advocacy has been defined as “action by a physician to promote those social, economic, educational, and political changes that ameliorate the suffering and threats to human health and well-being.”¹ There has been extensive debate in prior literature surrounding the degree of physicians’ professional commitment to advocacy.²⁻⁵ Huddle argues that the goal of advocacy activities leading to change is disparate from the goal of knowledge associated with traditional research and education.³ He further states that medical professionalism does not imply civic participation by physicians. Alternatively, Croft et al. define a broader role of the physician obligation for beneficence, describing the myriad ways, including advocacy, that physicians can fulfill their ethical duty to improve patient health.⁵ Returning to the roots of our practice, Abraham Jacobi, the father of pediatric medicine, stated, “every physician is by destiny a ‘political being’ ... that is, a citizen of a commonwealth, with many rights and great responsibilities.”⁶

The Evolving Role of Physician as Advocate

Recent changes in health policy have led to a profound shift in the debate surrounding the role of physicians as advocates.⁵ As incentives move health care payment models from fee-for-service toward value-based capitation, preventive care for patients and populations has become more important.⁷ Additionally, modern physicians are increasingly expected to participate in population health activities relevant to improving the health of both patients and communities.² Enhancement and expansion of preventive service delivery involves more consistent actions to address social determinants of health and to improve patient-centered outcomes. Often, this can only be achieved through multidisciplinary advocacy efforts that may stray outside of the traditional health care system.

Advocacy is undergoing a transition period, moving from relying on individual physician-advocates to expecting advocacy from the profession at large.^{1,4} As a result, there have been organizational and profession-based movements pushing physicians to more effectively integrate advocacy and medicine.⁵ In 1996, the Pediatric Residency Review Committee called for training programs to “advocate on behalf of the health of children within communities.” Following suit, the American Board of Internal Medicine and the American Medical Association both endorsed a position that physicians must engage in advocacy.¹ The American Academy of Pediatrics similarly called for an enhanced role for pediatricians to address community health and child poverty.⁸ Expanding upon these trends and as part of his Academic Pediatric Association presidential address, David Keller, a Colorado pediatrician, called on physicians to take an academic approach to advocacy and public policy to improve health for children.² Such an approach, however, requires thoughtful deliberation about what constitutes advocacy and how actions related to advocacy align with expectations for academic scholarship. While clinical competencies and milestones have been written with increasing precision over the past three decades, advocacy-related competencies still need definition.

Given this evolving paradigm, we contend that it is appropriate to move past the debate and instead focus on how physician advocacy can best be pursued, documented, and evaluated. With respect to documentation and evaluation, we argue that much can be learned from the preceding evolution in higher education. In 1990, Boyer proposed that educators’ contributions to higher education should be measured by their scholarship of discovery, integration, application, and teaching. This expanded definition of scholarship was further refined by Glassick, who proposed six themes for assessing the quality of scholarship, regardless of its form. These standards are: clear goals, adequate preparation, appropriate methods, outstanding results, effective

communication, and reflective critique.⁹ This allowed educators to document a scholarly approach to education, just as researchers document and then are evaluated and promoted for their quality research.^{9,10} To support this objective documentation, the Educator Portfolio (EP) was introduced,¹¹ and its use has dramatically increased.^{12,13}

In traditional academic models where promotion is based primarily on research grants and publications, advocacy-related contributions may not prompt congruent career development and advancement.¹⁴ Reasons for incongruence include the relative value academic institutions place on advocacy compared to research, despite the potential impact effective advocacy can have on populations. Another factor is the lack of a systematic method for documenting and measuring the scholarly nature of physician advocacy efforts regardless of project scale or outcome.

Currently, physician-advocates may customize their resumes or curriculum vita (CV). Others may be uncertain how to represent the value of advocacy projects, in terms of both scholarly contribution and impact on patient and/or population outcomes. This is largely because, like the scholarly field of education,¹⁵ advocacy does not always lend itself to documentation of quantitative metrics frequently presented on an academic CV. Instead, advocacy outcomes can often take a more qualitative form, perhaps more amenable to presentation in the portfolio format commonly used by educators. Thus, here we propose a standardized Advocacy Portfolio (AP) to document the scholarly contributions made by physician-advocates.

Documentation of advocacy activities through the AP helps to show project impact and value in the academic setting as relevance in the broader health landscape grows. In this article we identify broad domains of physician advocacy, establish metrics relevant to the quantity and quality of successful advocacy, describe a scholarly approach to physician advocacy, and present a format through which documentation can be standardized. Finally, we draw conclusions

surrounding the larger implications of the AP, highlighting future directions, advocacy training needs, and research gaps. We hope that the AP provides a foundation for the future establishment of objective criteria to evaluate the academic contributions of physician-advocates.

On Advocacy and Scholarship

Measuring advocacy should be held to an academic standard through documentation of quantity and quality. Additionally, we propose that advocates use the AP to advance both their scholarly approach and their scholarly product. These terms are defined and modeled by the Toolbox for Evaluating Educators, available on MedEdPORTAL.¹⁶ For purposes of the AP, we provide definitions and examples of these terms as they relate to advocacy:

- Quantity: Describes “countable factors” including “who, what, where, when and how”;¹⁶ for example, number of persons touched by advocacy efforts, numbers educated or empowered, or audience of media outlets engaged.
- Quality: Describes the effectiveness of advocacy activities in terms of impact; includes such measures as success of legislation, evidence of application by learners (patients or trainees), and process or outcome measure.¹⁷
- Scholarly approach: As adapted from Simpson et al. in the EP literature, engagement with the advocacy community by “reviewing and building upon other [advocates’] work, informed by literature, and ‘best practices’ in the field”;¹⁷ the AP format specifically allows for documentation of a scholarly approach through application of Glassick’s criteria and attention to the questions posed in Table 1.^{9,12,16}
- Scholarly product: Scholarship is further defined as advocacy products “judged through a peer review process and then made available for use/adaptation by others”¹⁶ that “advance the field.”¹⁷

Table 1 summarizes the six standards of a scholarly approach as proposed by Glassick, highlighting important questions for the physician-advocate and institution to consider when determining the scholarly quality of advocacy work. While successful advocacy and quality scholarship may not always overlap, the portfolio will help advocates translate successful, quality advocacy into quality scholarship by facilitating the documentation of a scholarly approach. We believe that the AP should consider all six criteria of scholarship, so that even if substantive results are not achieved, the effort can still be documented as scholarly as others may learn from this experience moving forward.

In many ways, advocacy fits nicely into Glassick's traditional framework. Still, our presentation in Table 1 also highlights barriers to analyzing and measuring advocacy that do not arise during more traditional considerations of research as scholarship. One such barrier is that there are many occasions where advocacy is opportune, taking advantage of a specific policy window or political climate. For example, efforts to increase funding for lead remediation in homes may be more successful in the wake of events occurring in Flint, Michigan.¹⁸ Such characteristics of advocacy inherently limit the ability for planning to the extent found in research or medical education.^{1,14} Thus, the AP must be nimble to address gaps that may arise during the application of traditional academic standards to advocacy activities.

Development of the Advocacy Portfolio

Educator Portfolios are being used more widely to document medical educators' scholarly activities in American medical schools.¹⁹ Similar to the traditional portfolio format used in EPs, the AP would contain the following components:^{17,19,20}

- Personal statement: Advocacy philosophy, career goals, intended use of the portfolio, and context for review¹⁹;

- Domains of advocacy activities: Advocacy activities spanning various domains including proof of excellence through documentation of quantity and quality¹⁷; and
- Evidence of a scholarly approach and scholarship: Level of engagement with the advocacy community within each domain, including evidence of a scholarly approach through application of the Glassick framework and evidence of scholarship in advocacy.^{15,17}

Similar to the EP, we feel that documentation of excellence in advocacy activities could benefit greatly from this proposed AP format.

We identified advocacy activities that seek either directly or indirectly to achieve improvement in health for a population of patients. Traditional advocacy categorization is divided either based on type of advocacy, for example, legislative or grassroots; or based on level of intervention, for example, clinic/hospital, local/community, state/federal. However, we defined advocacy domains proposed herein using descriptions of physician advocacy published in the peer-reviewed literature (Table 2).^{1,2,21} Specifically, Dobson et al. surveyed physician-advocates to identify five main categories of advocacy activities: clinical agency (addressing patient needs in the medical setting), paraclinical agency (addressing social determinants of health for individual patients), practice quality improvement (practice-level actions to improve health for a population), activism (system-level change to improve health equity), and knowledge exchange (research and dissemination, teaching, and outreach).²¹ With these categories in mind, we have established the following domains of advocacy activities:

- Advocacy engagement;
- Knowledge dissemination;
- Community outreach;

- Advocacy teaching and mentoring; and
- Advocacy leadership and administration

Table 2 further outlines how quality, quantity, and a scholarly approach can be described within each domain, while Appendix 1 provides an example AP.

Although modeled on domains and documentation recommendations proposed by the Association of American Medical Colleges Group on Educational Affairs,^{17,15} the advocacy domains used here were adapted to reflect the specific skillsets relevant to physician-advocates. For example, while the EP focuses on assessment of and interaction with learners as an objective way to measure quality of educational scholarship, the AP focuses on the role that collaboration and communication play in the advocacy process.^{13,21} The surveys in Dobson et al. established a set of common “abilities” that allowed physicians surveyed to effectively engage in advocacy.²¹ Many of these abilities were considered unique to physician-advocates, including the ability to “see the bigger picture,” use of persuasion, and implementing ideas into action.²¹ Other principles of effective advocacy may include developing a clear mission, building coalitions, and working with the media.²² These qualities were integrated into the AP as a way of documenting the quality of advocacy work in each domain.^{8,21–23}

We assume that all physicians engage in advocacy on the level of the individual patient as part of professional responsibility²¹; even those authors in opposition to the integration of academics and advocacy support this idea.³ It is important to clarify that advocacy on behalf of the individual patient can still be considered scholarly, but this seems to fall more in the realm of clinical care. Therefore, these activities are not addressed in the AP. The AP is intended to guide physicians in the documentation of advocacy projects across multiple domains or within specific domains. Some may pursue a broad range of activities while others may focus their attention in just one

domain. Physicians may participate in other types of advocacy activities not specifically identified; our hope is that the AP is sufficiently broad to allow for adaptation of the standardized format.

Implications of the Advocacy Portfolio

Impact on advocacy efforts

Just as research can translate into improved health outcomes, so too can advocacy positively affect the health of patients, communities, and populations. Those who are academically productive in research, quality improvement, and education increasingly recognize how to illustrate literature gaps, define project objectives, plan a scholarly approach, and measure significant results. We propose that it is imperative for advocacy to proceed in this manner as well. If the ultimate goal of advocacy is to speak on behalf of patients and populations, then the organized approach outlined in the AP can only assist physicians in better achieving this goal.

Professional impact

Physician advocates and institutions can use the AP for a range of goals, from displaying a scholarly approach to advocacy to negotiating for protected time (FTEs/RVUs) for work that has such immense impacts on patient and community health. APs could also be used for application for a non-clinical job involving health policy, or tracking a career in public service. To the extent that advocacy involves traditional scholarly activities such as research or education, the AP could be used to support academic promotion within a clinician educator or clinician researcher track. This may be especially true at institutions without a designated promotion track for physician advocacy, of which few exist nationally. The AP provides an ideal format to support grant or institutional funding for ongoing advocacy work that improves population health on a practice or systemic level. Alternatively, successful documentation of advocacy as scholarly work in the AP

could be utilized for promotion at institutions with a clinician advocate track; or utilized as a first step towards establishment of such tracks.

We acknowledge that the AP is necessary but not sufficient for physician-advocates. Other factors must be integrated to enhance its utility, including alignment with the institutional mission, support from institutional leadership, and freedom to collaborate with others outside the institution. As indicated with the advent of scholarship in education,¹⁷ implementation of academic standards for advocacy should be accompanied by the development of institutional supports and resources for physician-advocates. As with EPs, however, we expect that full adoption of APs will require not only an independent promotion track, but also standardized criteria by which to evaluate advocacy work as scholarship within such a track.

Impact on medical education

If one accepts a professional obligation for physicians to engage in advocacy, it naturally follows that physician training would be inclusive of a specified advocacy skillset.⁵ Both institutions and physicians share a common goal – to more effectively prepare trainees to practice medicine in a rapidly changing health care system. Shipley et al. have defined and suggested strategies to enhance pediatric resident training in community pediatrics, including techniques for engaging residents, building strong academic community partnerships, and establishing criteria for a successful community health curriculum.²³ While there are efforts to implement a standard advocacy curriculum during residency,²⁴ current opportunities in medical training are limited in scope and not standardized.²⁵ While the AP describes key components of advocacy-related activities, integration of the AP into the academic landscape highlights the need for standardized advocacy training agreed upon by leaders at each stage of medical training. Armed with an advocacy skillset, trainees will be able to more effectively decide how to use advocacy

regardless of their specific clinical career path.¹

Future directions

Despite the outlined assumptions, there are limitations to the proposed AP model. It is inherently difficult to measure the impact, scope, and quality of physician advocacy, as addressed in Table 1. Measuring the number of persons touched by advocacy activities is also limited by the “population health denominator” – it is difficult to know the size of a population affected by change; we pose suggestions for measurement in Table 2. Yet the AP likely underestimates the numbers affected by change and the magnitude of that effect. While in some circumstances we may be able to measure quantity, this does not necessarily equate to quality. Similarly, some quality measures documented in the AP will inherently be more consistent with process measures than outcome measures. However, as modeled in the EP, quantitative measurement may be the first step leading to evaluation of advocacy as scholarship. Lastly, advocacy efforts are not always linear, meaning one action may lead to a variety of projects that assist in achieving a given outcome. Alternatively, the variety of confounders in population health can make it difficult to attribute a single outcome to a single advocacy or policy action. Although these serve as potential limitations to application, the above factors also highlight the need for continued development of standardized criteria for advocacy documentation and evaluation. Previous studies have used expert surveys to identify qualities and activities characteristic of successful advocates. To our knowledge, no studies have attempted to establish a standard set of academic competencies similar to those used to evaluate the quality of research or education.^{10,21} For example, one major limitation to applying the traditional scholarship definition to advocacy is that given temporal and political constraints, products of advocacy work are not always “peer-reviewed” prior to public dissemination, as in the case of white papers. Establishing national

consensus regarding criteria by which to rigorously evaluate APs as scholarship (similar to the EP Toolbox used to evaluate clinician educators)¹⁶ will assist in ensuring progression from a scholarly approach to evaluation of advocacy as scholarship. This would help identify contributions of physician-advocates that are valued by academic institutions, similar to the way in which peer review is utilized in more traditional forms of scholarship. Enhanced use and recognition of APs in academic settings is required to poise physician-advocates for the same degree of academic success as their research and educational counterparts.

Concluding Remarks

The AP has the potential to reinvigorate the roots of physician practice by demonstrating the impact of advocacy in medical practice and scholarship. This novel standardized tool provides the foundation for physician advocates to document advocacy scholarship and further support the health of communities and populations. As Abraham Jacobi stated, “It is not enough, however, to work at the individual bedside in the hospital. In the near or dim future, the [physician] is to sit in and control school boards, health departments, and legislatures ... and a seat for the physician in the councils of the republic is what the people have a right to demand.”²⁶ Health care, medical training, and clinical practice are primed for advocacy; it is the duty of our profession to support physicians in such endeavors.

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Table 1
Application of the Glassick Model of Scholarship⁹ to Advocacy Activities

Glassick model of scholarship	Examples of questions for the advocate	Examples of challenges to application of the Glassick model
<p>Clear goals:</p> <ul style="list-style-type: none"> • Basic purpose of work • Realistic and achievable objectives • Appropriate questions identified in the field 	<ul style="list-style-type: none"> • Does the advocacy work have a defined purpose and desired outcome? If so, is it quantifiable, realistic, and achievable? • Is the problem appropriately addressed by the scope and scale of advocacy activity being performed? • What would be a successful conclusion? 	<ul style="list-style-type: none"> • Implementation and outcome of work heavily influenced by often unpredictable external factors
<p>Adequate preparation:</p> <ul style="list-style-type: none"> • Understanding of existing scholarship • Appropriate skills and resources • Literature review 	<ul style="list-style-type: none"> • Based on quantifiable data, does the advocate have knowledge of the problem and theory of the solution? • Who are the key stakeholders, and how are they most effectively engaged in collaboration? • What strategies have been used before to create a successful outcome? In the absence of experience, what does the advocate hypothesize would be the most effective strategy? Why? 	<ul style="list-style-type: none"> • Advocacy efforts may be limited to one aspect of a multifactorial problem • Success may be difficult to measure • There may be a lack of previously published data and evidence

Appropriate methods:

- Use methods appropriate to goals
- Apply methods effectively
- Modify procedures in response to changing circumstance

- On what level is the advocacy being undertaken (e.g., patient, paraclinical, practice, community)?
- What are the most effective strategies to reach a successful outcome? Are these strategies informed by previous scholarship?
- How will the advocate document and evaluate the impact of the advocacy plan, including contribution of other stakeholders and collaborators?

- Unpredictable and/or time-sensitive external factors may require frequent and rapid evaluation and reassessment of methods
- Activities may require evaluation methodology based in social science, business, or other fields of inquiry less commonly utilized in medical research

Significant results:

- Achievement of goals
- Consequential addition to the field
- Additional areas for further exploration identified

- How is the advocate able to demonstrate improvements in patient outcomes, population health, and/or systems-based care?
- How is the advocate able to demonstrate replicability, sustainability, and stakeholder engagement?

- Controlling for the influence of external factors in evaluation of results may be difficult
- Accurate and precise measurement of outcomes will be difficult to quantify using traditional methods of medical scientific inquiry

Effective presentation:

- Suitable style, organization, and presentation of work
- Appropriate forums to communicate work to intended audiences
- Content presented with clarity and integrity

- Is the advocate able to communicate and persuade effectively in a variety of settings?
- Has the advocate disseminated work locally, regionally, or nationally, and has this dissemination led to successful replication?

- Dissemination may be limited by local or regional factors either internal or external to the institution
- Most rapid dissemination of results may be in forms other than peer-reviewed journals

Reflective critique:

- Critical evaluation of work
- Breadth of evidence included in critique
- Use of evaluation to improve future quality of work

- How will the advocate obtain both quantitative and qualitative feedback?
- How will this influence future advocacy efforts, and how will the advocate document this impact?

- Modeling or mentoring for this type of reflection within the medical field may be limited

Table 2
Domains of Advocacy Activities, Including Definition, Quantity, Quality, and Evidence of a Scholarly Approach

Domain and definition	Examples of quantity	Examples of quality	Examples of a scholarly approach	Examples of advocacy scholarship
Advocacy engagement: Practice or system level activities “aimed to create lasting change” ²¹ for a community or population of patients	<ul style="list-style-type: none"> • Level of change: practice, community, state, federal • Target patient population • Numbers of persons targeted or affected by change • System and stakeholders that were engaged in change: legislative, executive, judicial; congresspersons, aides, agencies • Methods of communication employed: verbal, written • Format of communication: public testimony, written testimony • SMART objectives established and achieved 	<ul style="list-style-type: none"> • Systems were engaged beyond the level of the individual patient, including addressing social determinants of health and health disparities • Change led to improved access to care, value of care, or health outcomes • Physician displayed skills of persuasion, communication, and collaboration to achieve intended outcome • Efforts build on relevant policy issues that are currently of public interest 	<ul style="list-style-type: none"> • Practice or systems need was previously addressed in literature (including Community Health Needs Assessment) • Solutions to address need were critically considered, using evidence-base where available • Even if change was not immediately achieved, results were disseminated and groundwork provided has the potential to lead to future change • Population health outcome measures were tracked, including quality-adjusted life years, infant mortality, and life-expectancy • Utilized frameworks that support planning, evaluation, and outcomes measurement including logic models 	<ul style="list-style-type: none"> • Activity led to a peer-reviewed publication documenting health outcomes associated with a population-level intervention; peer-review may extend beyond the medical community to include multiple disciplines • Invitation to present results of project at a national meeting • Public health intervention became standard of care

Domain and definition	Examples of quantity	Examples of quality	Examples of a scholarly approach and SWOT analyses	Examples of advocacy scholarship
<p>Knowledge dissemination: Activities aimed at disseminating knowledge²¹ to the public and policymakers</p>	<ul style="list-style-type: none"> • Level of communication: practice, community, state, federal • Approximate audience reached • Topic of knowledge disseminated • Media outlet employed: press, radio, internet • Level of stakeholder or policymaker educated and format: testimony, congressional briefing, city hearing • Invited versus voluntary 	<ul style="list-style-type: none"> • Information is communicated in a way that is concise, understandable, and persuasive • Information spreads awareness of a relevant issue in order to garner support for a cause and generate momentum • Patients and communities show evidence of improved knowledge, attitudes, and self-efficacy • Physician uses patient-centered language to convey complex medical topics 	<ul style="list-style-type: none"> • Information conveyed draws upon prior peer-reviewed literature and medical expertise • Knowledge disseminated is cited by policymakers and stakeholders to affect systemic change 	<ul style="list-style-type: none"> • Establishment of health and community partnership due to persuasion and advocacy skills • National recognition from press (print, media, online) • Testifying to legislators directly resulting in a public health benefit
<p>Community outreach: Building relationships to empower communities or populations</p>	<ul style="list-style-type: none"> • Community or population targeted: specific disease, health inequity, or race/ethnicity • Number of persons in community or population targeted • Coalitions established, 	<ul style="list-style-type: none"> • Physician coordinated activities with a community-based organization to build trust, including academic-community partnerships • Coalitions were built to increase motivation and 	<ul style="list-style-type: none"> • Community needs were identified and solutions were critically considered • Co-production of interventions with community residents • Results were effectively 	<ul style="list-style-type: none"> • Grant or institutional funding was secured in support of community outreach project • Successful establishment of a community based participatory research group

Domain and definition	Examples of quantity	Examples of quality	Examples of a scholarly approach	Examples of advocacy scholarship
	<ul style="list-style-type: none"> members, description of meetings • Community leaders trained • Community resources established or utilized 	<ul style="list-style-type: none"> chance of success • Systems were engaged beyond the level of the individual patient, including addressing social determinants of health and health disparities • Community members perceived a positive interaction and relationship was developed 	<ul style="list-style-type: none"> disseminated throughout the community and led to further community engagement projects 	<ul style="list-style-type: none"> • Community partnership model was disseminated and applied at other institutions
<p>Advocacy teaching and mentoring: Activities that lead to enhanced advocacy skillset for trainees or facilitation of trainee advocacy goals</p>	<ul style="list-style-type: none"> • Lectures or curricula designed • Frequency of lectures • Audience • Topic and relevance to advocacy • Advocacy projects facilitated or advised • Frequency of meetings with mentee • Duration of relationship with mentee • Reviewing of colleague or trainee AP 	<ul style="list-style-type: none"> • Trainees received skill set specific to advocacy, including making conceptual transition from individual to population health • Trainee evaluations showed that teaching affected skill development • Mentee evaluations showed that mentorship affected future career plans • Trainee or mentee accomplishments in advocacy 	<ul style="list-style-type: none"> • Learner needs were assessed prior to implementation of lecture or curriculum • Learning objectives were stated and achieved • Feedback was obtained from learners to facilitate more effective programs in the future 	<ul style="list-style-type: none"> • Curriculum developed is published in peer-reviewed literature or utilized at other institutions • Lecture series is published in an online peer-reviewed format • Grant funding obtained for advocacy curriculum development • Participation in a workgroup or committee that addresses a standardized advocacy skillset

Domain and definition	Examples of quantity	Examples of quality	Examples of a scholarly approach	Examples of advocacy scholarship
Advocacy leadership and administration: Leadership positions that positively affect population health outcomes or advance the field of advocacy ¹⁷	<ul style="list-style-type: none"> Organizational or committee affiliation Duration of position Role Organization goals and mission Population affected both directly and indirectly by leadership actions Measurable actions and outcomes enabled by leadership 	<ul style="list-style-type: none"> Trainees better able to meet AAMC or ACGME milestones for professional practice Position resulted in policy or systemic change that improved process or outcome measures for a population of patients Position enabled advocate to influence organizational mission to serve a designated population Position enabled advocate to advance the field of physician advocacy Volunteer versus elected positions 	<ul style="list-style-type: none"> Advocate starts a local leadership position that will set the foundation to work at a national level Advocate identifies clear goals of leadership position and organization, meets these goals, and/or identifies barriers to meeting goals that are addressed in future projects 	<ul style="list-style-type: none"> Participation in a national workgroup or committee that identifies policy/advocacy needs for a community, directs advocacy interventions, and/or guides outcome measurement of intervention

Abbreviations: SMART indicates specific, measurable, achievable, realistic, timely; SWOT, strengths, weaknesses, opportunities, threats; AP, Advocacy Portfolio; AAMC, Association of American Medical Colleges; ACGME, Accreditation Council for Graduate Medical Education.

Appendix 1

Example Advocacy Activities in Advocacy Portfolio Format^a

Case: A 5-year old female with poorly controlled moderate persistent asthma is admitted to the hospital for status asthmaticus. She has a history of known indoor environmental triggers including mold. The family and the patient’s pediatrician have been unsuccessful in convincing the family’s landlord to remediate the mold in her home, leading to multiple admissions for asthma exacerbations.

Project Description: Asthma was identified as a public health focus area in the hospital’s Community Health Needs Assessment. Children with asthma admitted to the hospital were electronically referred to community organizations upon discharge.²⁷ EHRs were used to track asthma admissions over one year and identify zip codes at high risk for asthma admissions.²⁸ Stakeholders were identified and a community coalition was built to address risk factors related to readmission for high-risk children with asthma. Home visitation using community health workers assisted in family education. Coordination with the local medical-legal partnership prompted landlords to remediate substandard housing conditions for patients living in high-risk zip codes.²⁹ The coalition and medical-legal partnership used legislative advocacy to prompt legislators to add mold to the list of state housing code violations.³⁰

Category	Quantity	Quality	Scholarly approach and scholarship
Advocacy engagement	<ul style="list-style-type: none"> EHR integration of electronic referral to community organizations led to an increase in environmental history documentation from 2% to 66% Using the EHR to guide decision making, 90% of those with an identified housing risk were offered a referral, and 65% of these received a Healthy Homes visit by a registered sanitarian. Using the state population health database, an estimated 3,000 children with asthma resided in 	<ul style="list-style-type: none"> Due to the success of legislation, mold was successfully added to the list of state housing code violations, and violations became enforceable under state law Home visits identified and helped to remediate substandard housing conditions, contributing to decreased morbidity and improved quality of life for families involved Admissions and emergency department visits for asthma 	<ul style="list-style-type: none"> Results of EHR electronic referrals were published as a QI article Asthma screening and referral became standard of care The successful mold legislation was subsequently adopted by other states

Category	Quantity	Quality	Scholarly approach and scholarship
	zip codes with a high density of housing code violations due to mold, and therefore had the potential to see improved health outcomes due to the legislation	<p>decreased by 40% in children referred to community programs, amounting to \$150,000 in healthcare savings annually</p> <ul style="list-style-type: none"> The state legislature decided to increase funding for the Healthy Homes program by 20% for the subsequent year's budget 	
Knowledge dissemination	<ul style="list-style-type: none"> Local radio station interview regarding project with an estimated audience of 30,000 listeners Invited to give a briefing on childhood asthma prevention to congresspersons on Capitol Hill Results of the coalition were presented to one state Medicaid MCOs that provides insurance coverage for an estimated 20,000 children 	<ul style="list-style-type: none"> Information was communicated in a concise, understandable, and persuasive manner The hospital was able to negotiate with MCOs for bundled payments for high-risk children with asthma 	<ul style="list-style-type: none"> Congressional testimony and radio station interview relied on current statistically relevant project results and prior peer-reviewed literature regarding home visitation and environmental remediation for children with asthma
Community outreach	<ul style="list-style-type: none"> As part of the coalition, lectures were given to 20 community leaders regarding management of environmental triggers for asthma Community leaders subsequently provided education to an estimated 500 community members in settings such as church groups, town halls, and schools 	<ul style="list-style-type: none"> Community members showed evidence of improved knowledge, attitudes, and self-efficacy as measured through surveys The coalition and educational programs led to the establishment of further academic-community partnerships within the hospital 	<ul style="list-style-type: none"> Community partnerships allowed investigation into community health disparities and social determinants of health Grant funding for educational programs was obtained Project led to national newspaper article as example of community-hospital partnership in improving asthma outcomes

Category	Quantity	Quality	Scholarly approach and scholarship
Advocacy teaching and mentoring	<ul style="list-style-type: none"> • Semi-annual lectures and teaching were provided to 40 residents and 100 medical students regarding importance of screening for social determinants of health and referral to community resources • Monthly meetings with 10 residents interested in advocacy 	<ul style="list-style-type: none"> • Residents reported a 70% increase in their ability to obtain a competent environmental history • One of these residents pursued a career in health policy 	<ul style="list-style-type: none"> • Resident obtains grant funding for an offshoot of original project • Lectures were disseminated and utilized at outside institutions through an online peer-reviewed format
Advocacy leadership and administration	<ul style="list-style-type: none"> • Became chair of community partnership organization for 2 years 	<ul style="list-style-type: none"> • Leadership roles with a national advocacy organization led to dissemination of project results to multiple state public health departments 	<ul style="list-style-type: none"> • Community partnership engagement led to sustained funding for projects

Abbreviations: EHR indicates electronic health record; QI, quality improvement; MCO, managed care organization.

^aContents of the appendix are a combination of ideas generated from the relevant literature and the authors' experience.