



Pediatric radiology and advocacy: a professional responsibility

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Introduction

It is not enough to work at the individual bedside in the hospital. In the near or dim future, the pediatrician is to sit on and control school boards, health departments, and legislatures. – Abraham Jacobi, father of American pediatrics (1904) [1]

Recognizing the societal and political forces that impact child health and health care delivery, Jacobi urged pediatricians to be actively engaged in policy-making and legislative affairs. Physicians are well-positioned to effect changes that can improve public health, given their understanding of the associations between social factors and health, their strong public credibility, and their above-average access to political leaders and policy makers [2]. Because of this potential, public physician advocacy has become increasingly viewed as a professional responsibility [3–5].

Although current Accreditation Council for Graduate Medical Education (ACGME) program requirements specify that pediatric residents receive advocacy experience during residency, few radiology residency programs offer formal instruction in advocacy [6, 7]. As a result, many radiologists are unfamiliar with what advocacy entails, why radiologists should engage in advocacy, and how to get involved in advocacy efforts. This is particularly important for pediatric radiologists as advocates for children, who cannot speak up for themselves or vote on issues that concern them. In this paper, members of the Society for

Pediatric Radiology (SPR) Public Policy and Advocacy Committee, the American College of Radiology (ACR) Commission on Economics and the ACR Commission on Pediatric Radiology (Pediatric Radiology Economics and Advocacy Committee) provide answers to frequently asked questions about advocacy. We include descriptions of advocacy organizations, real-life examples of advocacy success stories, current issues of interest and essential advice for succeeding in advocacy. The views presented in this paper represent the authors' personal opinions and do not represent the opinions of the SPR or the ACR.

What is advocacy?

The word *advocate* comes from the Latin *ad* (“to”) and *vocare* (“to call”). Advocacy is the act of supporting, defending or arguing for a specific cause or issue. The purpose of advocacy is to bring about change, or sometimes to preserve the status quo, whether that is accomplished through raising public awareness, generating support or influencing policy for a certain issue [8].

Earnest et al. [2] defined physician advocacy 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 that he or she identifies through his or her professional work and expertise” [2]. Physician advocacy has had an important role in health care and particularly in radiology over the years. Several foundational principles exist in health advocacy, including “ensuring access to care, mobilizing resources, addressing health inequities, influencing health policy, and creating system change” [9]. Advocacy in radiology has played an important role in educating policymakers regarding issues surrounding imaging services for patients and is one of the pillars of the ACR mission statement [10].

Why is advocacy important?

Radiology advocacy focuses on how to help our patients by protecting their interests and well-being through ensuring access to high-quality evidence-based medical imaging

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care. Studies have shown the value of advocacy, including advocating for fair and appropriate reimbursement for services. These efforts require time, resources and capital but are necessary for the vitality of our profession [10]. Advocacy plays a crucial role in educating policymakers on the value of radiology in the health care enterprise. In pediatric subspecialties, this is particularly important because patients are typically unable to advocate for their health care interests. As physicians, it is paramount that we are politically and publicly aware, active and engaged.

What are the different types of advocacy?

There are numerous types of advocacy. One way to categorize them is by considering the individual or group that the advocacy is intended to benefit. For example, self-advocacy is activity by an individual based on their own interests. Individual advocacy is similar but is advocacy of one person on behalf of another. Systems advocacy, which is the primary focus of this paper, is a group of people advocating for changes to laws or policies that impact a population. Systems advocacy itself can be further segmented into sub-types. There is systems advocacy on public policy, such as requesting the U.S. Congress to pass a law, as well as systems advocacy on private policy, such as supporting change to commercial health plan policies. Each of these sub-categories has its own set of activities and tactics.

Two major strategies used in systems advocacy are grassroots and grasstops (Fig. 1). Grassroots advocacy involves engaging a group of aligned individuals and supporting their efforts to reach out to decision or policy makers, such as their representatives in Congress. A commonly used

grassroots tactic is the email campaign. A mass email is sent to a group of likely supporters, asking them to reach out to a decision-maker. Often, the email directs them to an “action center” webpage, where they are asked to input or confirm their name and address, and the system then sends a pre-populated message to their particular lawmaker(s). These automated systems take only a few moments, lowering the barrier to engagement. Requiring more time, advocates might also call the office of a lawmaker or other key decision maker. While it is unlikely that advocates can speak directly to the main person, they can leave a message with their comments. This activity, multiplied by numerous constituents, can help soundly convey the message. The power of the grassroots campaign is strength in numbers. A Congressional office that receives hundreds or thousands of messages on a subject is likely to give it more consideration than a subject that generates one or two. Other benefits of grassroots advocacy include expanding the base of supporters. Spreading the message within a broad group of likely supporters can lead to even greater diffusion of the message. Expansion of the supporter base can also advance fundraising goals because there is a larger group to draw from.

As opposed to grassroots advocacy, a grasstops approach involves direct communication with a key individual or their staff. This could include an in-person event, such as a meeting in a Congressional office; however, the video-teleconference meetings that have become popular in recent times are likely to persist [11]. With grasstops, the connection is personal and direct. The meeting is an opportunity to share a story or personal experience about an issue. The goal with grasstops advocacy is to directly influence the decision or policy maker. Often, lawmakers have limited understanding of a subject and depend on their staff for expertise. A direct meeting with the lawmaker and their staff is a valuable opportunity to explain the importance of an issue and why they should support or

Fig. 1 Graphic shows a comparison of the key features of grasstops and grassroots approaches to advocacy



oppose a policy. Occasionally, the grassroots connection is based on a pre-existing relationship. For example, a supporter of the advocacy movement might know a member of Congress. Alternatively, professional lobbyists are often engaged to help facilitate grassroots meetings. Organizations might hold fundraisers for an elected official as a way to connect with the lawmaker and their staff. Frequently, the leader of a grassroots effort is afforded a personal meeting. In this way, a grassroots campaign can support a grassroots approach. In fact, the two are often performed in conjunction and in a coordinated fashion.

How is advocacy different from lobbying?

Advocacy includes a broader class of activities than lobbying. Advocacy is the act of embracing and promoting a cause to bring about change; these actions could be in the public or private sector. Some examples of advocacy include:

- educating a legislator, a member of an administrative body, or the public about an issue;
- performing or disseminating analysis of an issue;
- supporting access or education to affected community members about a topic; and
- providing advice to a legislative body or committee in response to a written request from that group.

Lobbying is a form of advocacy, with the goal of influencing a decision maker on a specific piece of legislation or policy. Meeting with a legislator to explain why he or she should vote for or against a piece of legislation is an example of lobbying.

Not all advocacy is lobbying, but all lobbying is advocacy. This distinction is relevant for 501(c)(3) nonprofit organizations, which are forbidden to engage in substantial lobbying activities [12, 13]. Further information on the differences among various types of advocacy organizations follows.

What are the activities and restrictions of various advocacy organizations?

To effectively engage in advocacy activities, formally structured organizations have been developed. Because of their ability to influence legislation and elections, the federal government recognizes and regulates several types of advocacy organizations [14, 15]. A detailed analysis of these is beyond the scope of this paper; however, a brief overview of some differing types of federal advocacy organizations is presented in Table 1. Each of these types of organizations serves a specific purpose within the broader set of advocacy activities. A campaign on an issue or candidate often involves more than one type of advocacy organization.

Section 501(c) of Title 26 of the United States federal income tax code describes a group of tax-exempt, not-for-profit organizations. Some of these groups can engage in lobbying and political activities to a greater degree than others. For example, 501(c)(4) organizations are tax-exempt groups that are intended to promote “social welfare” [16]. These advocacy organizations are allowed to engage in lobbying and can engage in some political activities. For example, the American Civil Liberties Union (ACLU) is a 501(c)(4) group. In contrast, 501(c)(3) organizations are foundations and charities. The American Red Cross is a well-known example of a 501(c)(3) organization. In radiology, RAD-AID, which supports radiology services in low-resource areas globally, is an example of a 501(c)(3) organization. These groups are particularly limited in how they can engage in advocacy and risk losing tax-exempt status if they inappropriately engage in political lobbying. The Internal Revenue Service states that 501(c)(3) organizations are “prohibited from directly or indirectly participating in, or intervening in, any political campaign on behalf of (or in opposition to) any candidate for elective public office” [17]. Note that direct contact with decision-makers, such as leaders of private companies as well as public officials, on behalf of the organization is permitted. For example, the SPR, in conjunction with the Society of Chiefs of Radiology at Children’s Hospitals (SCORCH), the ACR and the American Academy of Pediatrics (AAP), advocated for change to the clinical site-of-care policies from private health insurers [18, 19]. They did not, however, engage in activities to influence an election, and stayed within the legal boundaries of their 501(c)(3) status. Finally, donations made to 501(c)(3) organizations are tax deductible, unlike those made to 501(c)(4) organizations.

Some organizations are affiliated with more than one type of tax status group. For example, the ACLU is a 501(c)(4) organization, but there is also an ACLU Foundation, which is a 501(c)(3) organization. The ACLU Foundation focuses on public education and litigation. As with other 501(c)(3) organizations, donations to the ACLU Foundation are tax deductible, unlike donations to the ACLU. Similarly, the ACR is a 501(c)(3) organization, which is essentially precluded from engaging in political activities. To allow it to serve its function as the main advocacy organization for radiology, the ACR established the American College of Radiology Association (ACRA). The ACRA is a 501(c)(6) organization, which is a “business league” type of organization that is permitted to engage in political activities [20]. The ACRA operates a political action committee (PAC), known as RADPAC.

A PAC is a fund that collects money from the members of an organization or the public and uses them to support or oppose a particular candidate or policy. Some PACs, like RADPAC, are anchored to a host organization and referred

Table 1 Activities and restrictions of various advocacy organizations

Type of organization	Description	Contribution limits	Donor disclosure required?	Donations tax-deductible for donor?	Ability to engage in legislative advocacy	Ability to engage in candidate election advocacy	Examples
501(c)(3)	Religious, educational, charitable or scientific organization	No limit	No	Yes	Limited	No	Society for Pediatric Radiology American College of Radiology American Academy of Pediatrics RAD-AID
501(c)(4)	Social welfare organization	No limit	No	No	Yes	Limited	American Association of Retired Persons American Civil Liberties Union
501(c)(6)	Business league	No limit	No	No	Yes	Limited	American College of Radiology Association
Traditional political action committee (PAC)	Political action committee	\$5,000/year	Yes	No	Yes	Yes (can coordinate with candidate)	RADPAC
SuperPAC	Independent expenditure-only committee	No limit	Yes	No	Yes	Yes (cannot coordinate with candidate but can lobby for/against a candidate)	Senate Majority PAC

to as a separate segregated fund, or a “connected PAC” [21]. The benefit of this arrangement is that the operational expenses of the PAC can be covered by the sponsoring organization. The disadvantage of connected PACs is that there are limitations in who they can solicit from; generally speaking, they are limited to soliciting individuals affiliated with the host organization. Non-connected PACs can solicit donations from the general public but must use the funds they raise to operate the PAC [22]. Like connected PACs, non-connected PACs have strict rules governing fundraising, political activities and public reporting. While both connected and non-connected PACs are tax-exempt non-profits, donations to the PAC are not tax deductible. Both connected and non-connected PACs can give directly to a candidate’s campaign, can advocate specifically for or against a candidate, and can coordinate with a campaign. With both PAC types, corporations and unions are not permitted to make donations, and there are limits on both contributions and spending.

Independent expenditure-only committees, commonly known as “Super PACs,” are permitted to raise unlimited amounts, including from corporations and unions. Further, while Super PACs are required to disclose donors, techniques are available that make it challenging to determine the true

source of the funding (so-called “dark money”). Super PACs are not permitted to directly donate to candidate campaigns or to coordinate with their campaign. Super PACs can directly advocate for or against a candidate, just not in coordination with the candidate’s campaign [23]. Concerns have been raised that these types of advocacy organizations, with nearly unlimited budgets, can have an outsized influence on elections [24].

OpenSecrets.Org, an independent, non-partisan 501(c)(3) organization that provides data on the different types of advocacy groups as well as information on the public reporting of these groups, is a useful reference to understand the various and complex types of advocacy organizations [25].

How have pediatric radiologists made an impact through their advocacy efforts?

Aside from providing medical care for children, pediatric radiologists have been influential in pediatric public health by disseminating their scholarly work and engaging with partners in government, industry and medicine.

As an example of their efforts in public health, pediatric radiologists recognized and studied the excess cancer mortality risk

attributable to radiation from pediatric CT exams. Soon after the lay press reported the findings of a 2001 publication, pediatric radiologists responded to concerns from alarmed parents and answered questions in the news media [26, 27]. Recognizing the need for deeper discourse on the subject, the SPR leadership organized a multidisciplinary conference of medical physicists, physicians, technologists, equipment vendors and government regulators to discuss issues of pediatric CT radiation dose, the first of a series of ALARA (as low as reasonably achievable) conferences [28]. Within 6 years, members of the SPR and other imaging organizations founded the Image Gently Alliance, whose mission is “through advocacy, to improve safe and effective imaging care of children worldwide.” The alliance now includes more than 100 international organizations committed to promoting pediatric radiation dose awareness and reduction [29]. The ALARA conferences and formation of the Image Gently Alliance have not only raised awareness about the importance of medical imaging and radiation safety, but they have led to partnerships with vendors of imaging equipment and government agencies to advance safe, high-value care [30].

More recently, pediatric radiologists collaborated with other physicians to communicate their concerns to health insurers regarding imaging site-of-care policies [19]. In 2017, Anthem, Inc., a large U.S. health insurance company, implemented “steerage” policies that directed patients away from hospital outpatient imaging toward free-standing centers, citing concerns over cost [31]. The policy stated that for children 10 years and older, it would not cover the costs of outpatient advanced imaging exams, like CT and MRI, if they were performed in the hospital setting, with few exceptions. UnitedHealthcare, and then Cigna, two other large national health insurance companies, followed with similar steerage policies. Such policies are problematic because specialists with pediatric competencies are more often available at hospital-based imaging centers compared with freestanding imaging centers and are able to provide value to patients through adolescence. Members of the SPR and SCORCH quickly mobilized, joining forces with representatives from the ACR and the AAP, among others, to point out to the insurers that the specialized personnel, imaging protocols and equipment at pediatric centers are valuable to patients through their teenage years. In response, Cigna, and then UnitedHealthcare, altered their policies to allow for pediatric patients to have their imaging done at hospital-affiliated centers. In response to a letter from the SPR and ACR, Anthem agreed to review its policy and subsequently modified it, allowing children up to the age of 19 to access hospital-based imaging [32–35]. Interestingly, when Aetna, also one of the nation’s largest health insurance companies, announced its steerage plan in the fall of 2021, they excluded pediatrics [36]. The advocacy win with Aetna came without a fight, likely a result of prior advocacy efforts and policy reversals with the other major payors.

Is it ethical for physicians to advocate for policy or legislative changes that benefit them financially?

Yes, it is ethical, provided these policies and legislative changes benefit patients and their families and do not harm families financially. Medical practices require capital and resources to remain operational, so radiologist-led advocacy for fair reimbursement to maintain services is in the interest of the patients they serve and the staff they employ. Inadequate reimbursement threatens access to care by disincentivizing ongoing medical practice operations. As pediatric radiologists, it is our responsibility to ensure that infants and children have access to the imaging services they need in a child-friendly environment with protocols using the correct amount of radiation for the child and the expertise of pediatric radiologists and pediatric imaging staff. With that said, financial toxicity, and the fear of medical expenses, can also limit care. This is the reason so many physicians advocate for broad coverage and affordable insurance programs that promote high-value care and reimburse at reasonable levels.

What are some other current advocacy issues for pediatric radiologists?

- *Scope of practice for allied health professionals:* Because radiologist physicians are uniquely qualified to provide safe, high-quality imaging care, it is important to ensure that non-physician providers like physician assistants, nurse practitioners and radiology assistants provide care only as part of radiologist-led teams [37]. The ACR works with state chapters to advocate for clearly defined scope of practice for these allied health professionals.
- *Artificial intelligence (AI) algorithms and their training and performance on children:* Only 1 of more than 100 U.S. Food and Drug Administration (FDA)-cleared AI medical imaging tools is cleared for use in children. Without creation of algorithms suitable for the pediatric population, our patients cannot benefit from implementation of AI tools. Furthermore, the inappropriate use of AI applications that are not specifically tested and cleared for use in children could result in patient harm [38]. The ACR Commission on Informatics recently formed a dedicated pediatric working group to address these issues [personal communication with Dr. Marla Sammer].
- *Medicaid reform and access to care:* Medicaid is the single largest insurer of children; together, Medicaid and the Children’s Health Insurance Program (CHIP) provide health coverage to more than 40% of all children and greater than half of children of color [39–41]. Medicaid has historically reimbursed physicians less than other payors, including Medicare [42]. Children covered by Medicaid can have greater

difficulty accessing care than children with commercial insurance [43]. In addition, after a significant decline in the pediatric uninsured rate after implementation of the Affordable Care Act, the rate has again been rising [44]. Advocacy on Medicaid reform and access to high-quality care remain important issues in the pediatric community [45].

Pediatric radiologists should also consider collaborating with pediatricians and other pediatric specialists to get involved in important general pediatric care issues not involving radiology — for instance, button battery legislation, firearm safety and clean water access.



Fig. 2 Photograph shows members of the American Academy of Pediatrics Colorado chapter on a visit to Capitol Hill

How can I get involved in advocacy?

Although advocacy might seem daunting at first, there are many ways to get started. For pediatric radiologists, the SPR Public Policy and Advocacy Committee and the ACR’s Pediatric Economics and Advocacy Committee are helpful ways to become engaged. Both are dedicated to advocating for access to high-value pediatric imaging-based care.

As an example of their efforts, the SPR Public Policy and Advocacy Committee collaborated with the ACR during its virtual Capitol Hill Day in May 2021. A Hill Day visit is a meeting of constituents with their Congressional

Table 2 Tips for success in advocacy efforts

Find friends	Coalition building is a cornerstone of successful advocacy. When advocating for change to the clinical site-of-care policies of commercial insurers, the SPR and SCORCH worked alongside aligned groups including the ACR and AAP [17]. Additionally, in 2020 when advocating on the Medicare Physician Fee Schedule cuts, which included substantial reductions to radiology reimbursement, the ACR helped lead a coalition of societies representing more than 1 million providers. This coalition led to Congressional action and a more than 50% reduction in the planned cut to radiology [46]
Build trust	Advocacy is about exercising influence, and part of that influence comes from establishing trust. Often decision makers are unfamiliar with the nuances of health care policy and must be educated. The education process requires trust. If advocacy groups are perceived to be untrustworthy or prone to hyperbole, then persuading policymakers to act can be more challenging. For this reason, advocacy efforts in collaboration with organizations recognized for high-quality care, such as the SPR, ACR and AAP, are more likely to be influential when educating policymakers regarding issues
Bring data	To quote famed engineer and management consultant W. Edwards Deming, “Without data, you’re just another person with an opinion.” Advocates must be armed with information to make a strong case for their cause. As an example, in the campaign against pediatric steerage, the data demonstrated that children’s facilities are more judicious in their use of radiation. This supported the argument that there is an advantage to imaging children in pediatric-focused centers
Professionalism counts	In all communications, written and verbal, be respectful. There is no place in successful advocacy, including online social media posts, for inappropriate language or derogatory comments. Further, for in-person or on-camera meetings, such as Hill Day activities, dress appropriately and respect time parameters. Be on time, don’t run long, and thank people for their time
Roots and tops	Successful campaigns often leverage synergistic grassroots and grasstops approaches. A colleague might personally know a U.S. senator and be able to coordinate a meeting; however, the impact of that meeting will be enhanced if the senator’s office is receiving hundreds of messages in support of the subject. Additionally, a grassroots campaign might be under-appreciated until there is a direct meeting where stakeholders are given an opportunity to explain the issue in personal terms
Pro tip	Working with advocacy professionals can improve both the efficiency and efficacy of a campaign. This can take the form of societal governmental relations staff, hired lobbyists or other experienced personnel. Not only can these individuals often facilitate meetings through their own network, but they also understand best practices and can help guide groups through the maze of advocacy
Follow-up	Legislative offices meet with numerous delegations, so it is important to stay in contact with them to maintain focus on requests. One way to make a request more clearly memorable is with a “leave-behind” document, which staff can reference after the meeting. This should be a one-page summary of key “asks” and highlight any important background and data points. Requesting a follow-up meeting is another way to remain in touch

AAP American Academy of Pediatrics, ACR American College of Radiology, SCORCH Society of Chiefs of Radiology at Children’s Hospitals, SPR Society for Pediatric Radiology

representative or senators to educate them about issues of concern (Fig. 2). The ACR arranges such meetings annually to discuss timely topics. In 2021, the SPR Public Policy and Advocacy Committee worked to include the health insurer steerage issue on the list of subjects to be discussed with lawmakers and staff. Anthem, the first company to announce an imaging site-of-care steerage policy, had resisted calls for change. A few months later, Anthem reversed its policy, likely related to the advocacy efforts by the SPR and their partner groups.

Specialty workshops are another useful way to become involved in advocacy. The AAP offers an annual advocacy conference as an introduction to current pediatric topics and a step-by-step guide on how to discuss them with Congress. Besides luminary speakers who educate and inspire, there are small working groups to practice discussing the “ask” with experienced AAP staffers. This usually takes place in Washington D.C. but has been conducted on a virtual platform during the coronavirus disease 2019 (COVID-19) pandemic. Alternatively, both the ACR and AAP have local chapters within each state that support physicians wishing to get involved with local issues.

In the authors’ experience, the SPR, AAP and ACR are exceptionally welcoming to interested new members with any level of experience.

Tips to succeed in advocacy efforts

When launching an advocacy campaign, there are several pitfalls. We offer readers some important tips to help guide successful efforts (Table 2) [17, 46]. We also propose that pediatric radiologists consider incorporating advocacy education and experience into radiology residency and pediatric fellowship curricula, as our pediatrician colleagues have done, to nurture new generations of successful advocates.

Echoing and extending the teachings of Dr. Abraham Jacobi to our field, we encourage pediatric radiologists to engage in advocacy as a professional responsibility.

Declarations

Conflicts of interest None

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