

# The Think A-Head campaign: an introduction to Image Gently 2.0

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## Introduction

A decade has passed since the inception of the Alliance for Radiation Safety in Pediatric Imaging [1]. This milestone marks a good time for a look back at what has been accomplished and what needs to be changed. Specifically, this commentary could comprise what has been achieved, what kind of impact the campaign has made on radiation safety in pediatric

imaging and also, importantly, what missed opportunities or missteps have occurred that we can learn from. But the Alliance from the outset has been about moving ahead, sometimes intensely focused and sometimes with a broad visionary brush. The Alliance has focused on what is next and why this is important, and in the end, how to improve imaging care of children. The six campaigns of Image Gently illustrate this effort. These campaigns have primarily addressed modalities — computed tomography, radiography, fluoroscopy, nuclear medicine, interventional fluoroscopy, and most recently, dental imaging. The message, the messengers, and messaging [2] were the basis of these campaigns, and the campaigns have been a vehicle for education. The most recent campaign of Image Gently was rolled out Nov. 2, 2016. This campaign is the Think A-Head campaign for imaging children with minor closed head injury. What does this campaign tell us about the next 10 years of the Alliance? The answer comes from highlighting select changes, successes and challenges of the last 10 years and using these to understand the emphasis for the next 10 years, essentially Image Gently 2.0. This look back, then, will be a basis for the look ahead.

A few operational and governance clarifications have occurred. The first deals with the branding of Image Gently. While the title *Alliance for Radiation Safety in Pediatric Imaging* was defensible as a name and made sense 10 years ago, the Alliance leadership thought it was time for a new name that reflects the evolved mission and role of the campaign. As a first formal announcement, the Alliance for Radiation Safety in Pediatric Imaging, an aptly descriptive name, is now officially the *Image Gently Alliance*. People recognize the phrase Image Gently and use it in conversations and other communications, so this change resonates. The new message and branding is more simple, direct, and now emblematic. The second change was made because progress thrives with innovation, effort

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and consensus. This comes from people. So to this end, the Alliance steering committee has also expanded its leadership representation to include parent advocates, community practice radiologists, and adult imagers.

The message has also evolved. Early campaigns were primarily focused on the radiation protection tenet of appropriate dose management. Now the Alliance message has grown from that predominantly dose-reduction foundation to one of dose management, with an emphasis on appropriate and informed use, and on the value of the imaging findings [2, 3]. In the early days, one pressing need was to look critically at what we were doing, for example in excessive radiation from CT examinations, and this examination was fueled by a number of sources in both the medical literature and lay news media [4–8]. This recognition of radiation dose is still important, but it is now embedded within a more collective spectrum of responsibilities we have when imaging children. Promoting *doing less* has grown to a message of *doing it right*.

*Doing it right* involves another main tenet of radiation protection in medicine, which is, of course, justification: the examination is only performed when it is of value (recognizing that this is debated and quite complex [9, 10]). Justification, sometimes called appropriateness, is a shared responsibility, whereas management is primarily the responsibility of the imaging community: technologists, radiologists and other imaging experts outside of the specialty of radiology, as well as

medical physicists, all working as a team. When to order the study is a worthwhile direction to pursue. The most effective dose management strategy (considering all factors, such as radiation dose, money, equipment use) is avoiding a study that is of low value. We will return to this when discussing the Think A-Head campaign later in this paper.

Additionally, the growth of parallel missions, with like goals, is occurring. This began in 2009 with Image Wisely [11], a close and valued partner, and more recently has been evidenced through EuroSafe, Japan Safe Imaging, Canada Safe Imaging, AFROSAFE and LatinSAFE (Fig. 1). This has resulted in global messaging, networking and dialogue about responsibilities and actions. This growth brings opportunities, but also challenges, such as redundant efforts in a setting of limited campaign resources.

Increased recognition of the Image Gently model and brand [2] has also created opportunities to partner in development of regulation, guidance, accreditation, trade and other influences on health care related to imaging of children. The Alliance has established organizational relationships and input on documents and proposals with the Food and Drug Association, Environmental Protection Agency, the Joint Commission (TJC) [12] and the Medical Imaging & Technology Alliance. This place at the table is welcomed and contributory. One recent example of Image Gently Alliance input involved a TJC proposal of a national patient safety goal that included imaging of head injury in

**Fig. 1** Logos of a consortium of current radiation education/protection campaign organizations



children. Alliance leaders had frequent and transparent discussion with engaged TJC leaders, and after field review, the TJC initiative was dropped. Image Gently leaders agreed that some of the observations of TJC were accurate, but other premises in the stewardship to improve imaging care fell more under the responsibility of a non-accrediting organizations such as Image Gently; some of these guidelines, in fact, were certainly harmonious with work on the new Alliance campaign, Think A-Head. A second example of partnership and contribution involved a *Consumer Reports* article on CT use and potential risk [13], with frequent broadcasts through various media outlets. Leadership from the American College of Radiology, Image Wisely, National Council on Radiation Protection and Measurements, and Image Gently (an illustration of the value of a close Alliance) proactively visited the *Consumer Reports* headquarters in Yonkers, New York. A very engaging and productive conversation about facts of radiation risk and improved clarity of public communication fostered a much improved understanding of what should be conveyed and how.

These experiences have all shaped the focus of the Alliance's newest campaign. The changes made — simplifying the name/branding, clarifying the message of radiation management, expanding representative leadership, embarking on justification in radiation protection, and leveraging the growing recognition of Image Gently both in the United States and globally — were highlighted to set the stage for the Think A-Head campaign.

Head trauma is frequent in children [14, 15]. CT is used frequently to diagnose the child's condition and can be extremely helpful [16–21]. Head CT is in fact is the most common CT examination performed in children [22, 23], accounting for 5–11% of examinations performed across all ages [22–26]. The frequency of head CT varies, as does the performance and resultant radiation dose estimations across ages [26–29]. In addition, there is variability in adherence to best practice clinical guidelines [30–34]. The issue of head CT and cancer risk is debated [35–41]; parental as well as emergency department providers' understanding of medical radiation exposure and cancer risk can vary [42–45]. Emergent care involves multiple stakeholders, including the patient and family, primary care physicians; nurses; emergency medicine physicians; trauma, pediatric and neurosurgeons; and the imaging team. These groups have different roles, perspectives and challenges in delivering their focused care. CT, then, is a common examination occurring in a setting of head trauma, which is stressful [46, 47] (you only have to mention the word “concussion”), and recognized public concern and confusion over both loosely defined paths in care and potential radiation risk. This is exactly portfolio that Think A-Head is addressing. It is worth mentioning that this effort has also been embraced by

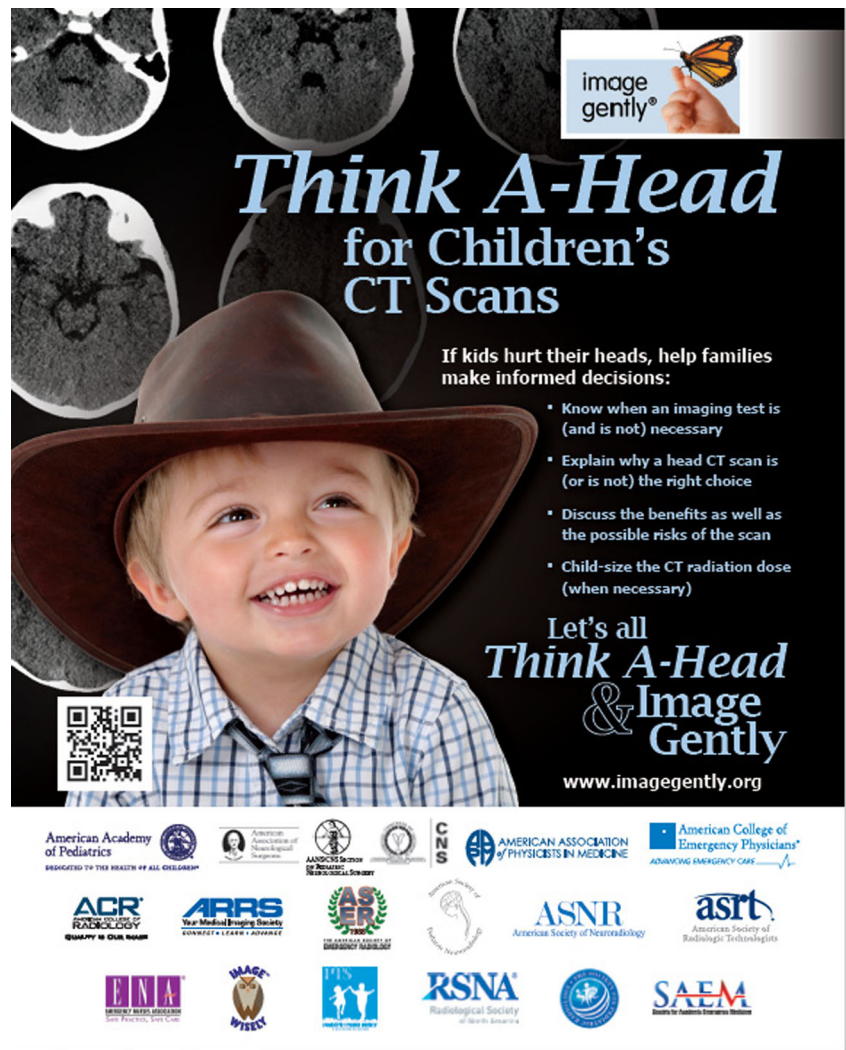
Choosing Wisely, which is aimed at reducing unnecessary procedures (and both Image Gently and Image Wisely have been recognized as influencers in the Choosing Wisely campaign) [48].

So how does Think A-Head provide a narrative based on the changes in the Alliance noted previously? Let us look at the campaign message, messengers and messaging. The campaign message is simple, resonant and has a reasonable translation across stakeholders — parents/public, clinical practitioners and the imaging team, as well as other experts involved in the care of the child. This is a new venture into appropriateness and is not limited to the domain of radiology. The messengers (campaign committee) are pediatric radiologists, neuroradiologists, pediatric trauma surgeons, pediatric neurosurgeons, nurses, pediatricians, emergency medicine providers and communications experts. Additional messengers such as family practitioners could have been added. This exclusion was not intentional. Fundamentally, more diverse groups are sometimes difficult to convene.

The partner organizations are on the poster (Fig. 2) and in Table 1. Dialogue among committee members has been frequent, open and sometimes critical, but always respectful and forged to keep on task. Discussions on justification require this consensus. Problems with partial consensus have been difficult [49]. The communication aspect is quintessential. Orchestration of messengers and messaging is critical when dealing with organizations in the Alliance that have a combined representation of more than 1,000,000 professionals. To this end, formation of an ad hoc communications committee has been much more important than in previous campaigns. The message must be harmonious within each constituent. Shawn Farley (American College of Radiology) and Greg Morrison (American Society of Radiologic Technologists), two long-standing steering committee members, have been invaluable to this end.

Other articles will deal with specifics of the Think A-Head campaign, focusing on the value of appropriateness and quality improvement [50, 51], including use of evidence-based guidelines (e.g., PECARN [52]) and head CT techniques for children [53, 54]. There will be continued dialogue about risk potential and communication, which we recognize will sometimes be challenging but is clearly essential [23, 46, 55, 56]. *Pediatric Radiology* as a journal has provided a home to the Alliance from the very origins by publishing more than 10 articles specifically addressing Image Gently. *Pediatric Radiology* has been a consistent portal for communication by and about Image Gently. This support has been in no small part instrumental in the successes of the Alliance. So the Image Gently Alliance continues to look ahead, to listen, and to change when needed. Image Gently 2.0 is the next 10 years. What has not changed is the unity in purpose through the use of heads, hands and hearts by so many to achieve informed, compassionate and expert imaging care of children.

**Fig. 2** The Think A-Head campaign poster



**Table 1** Organizations listed on the Image Gently Alliance Think A-Head campaign poster supporting the poster message

American Academy of Pediatrics
American Association of Neurological Surgeons and Congress of Neurological Surgeons (Joint Section) on Pediatric Neurological Surgery
American Association of Physicists in Medicine
American College of Emergency Physicians
American College of Radiology
American Roentgen Ray Society
American Society of Emergency Radiology
American Society of Pediatric Neuroradiology
American Society of Neuroradiology
American Society of Radiologic Technologists
Emergency Nurses Association
Image Wisely
Pediatric Trauma Society
Radiological Society of North America
Society for Pediatric Radiology
Society for Academic Emergency Medicine

These organizations support/endorse/participate in the principles of the campaign as listed on the Think A-Head poster, not necessarily other campaign-based content, such as in publications or presentations

**Compliance with ethical standards**

**Conflicts of interest** None

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