



Richard G. Just, MD and Gregg A. Masters, MPH

'Leveraging the wisdom of the crowd via real time peer sourced engagement in patient centric cancer diagnosis and care...'

Tumor Boards (“Team Huddles”) Aren’t Enough to Reach the Goal

‘Incremental changes in the tumor board infrastructure may increase the value of these team meetings and extend their potential benefits to low-volume physicians. The application of technology to create the “virtual” or telemedicine tumor board should be explored. Synchronous audio and video presentations that link physicians in remote areas with disease-specific expert clinicians, as well as asynchronous (“store and forward”) discussions, which focus on patient-specific management issues, are a potential infrastructure enhancement.’

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Additional context on Dr. Blayney ‘op-ed’ piece on Tumor Board as team huddle concept is available via a recent chat on [‘This Week in Oncology with Douglas Blayney, MD’](#).

Context

A centerpiece of the American College of Surgeons' Commission on Cancer (COC) standards to accredit hospital based cancer programs is a multidisciplinary conference (aka 'tumor board') of doctors and other cancer specialists, who meet on a regular basis to collaborate in the diagnosis and recommend treatment options for cancer patients. An active and vibrant tumor board is an essential consideration in the accreditation process. For further context see the Commission on Cancer's [‘Cancer Program Standards 2012, Version 1.1: Ensuring Patient-Centered Care.’](#)

As defined by the National Cancer Institute (NCI), a 'tumor board' is:

A treatment planning approach in which a number of doctors who are experts in different specialties (disciplines) review and discuss the medical condition and treatment options of a patient. In cancer treatment, a tumor board review may include that of a medical oncologist (who provides cancer treatment with drugs), a surgical oncologist (who provides cancer treatment with surgery), and a radiation oncologist (who provides cancer treatment with radiation). Also called multidisciplinary opinion.

Once a popular collegial if not ‘social’ venue to network and learn from one's peers, periodically present or consult on cases, possibly earn CME credit, if not grab an occasional meal, tumor board has unfortunately lost some of its attraction and 'gravitas'.

Increased practice complexity, misaligned financial incentives, declining reimbursement and growing demands on physician time, are some of the obstacles resulting in declining physician participation in traditional hospital based tumor boards. Yet few other comparable multidisciplinary, peer based clinical forums outside of mature integrated delivery systems or

academic medical centers have the potential to enable the integrated practice of collaborative, coordinated and evidence based community cancer care.

Realizing the Promise of Multidisciplinary Cancer Care

Many assume multidisciplinary care is better care, since it engages multiple minds in the care process, yet in *'The Need for Assessment and Reassessment of the Hospital Cancer Conference'*, in the Annals of Surgical Oncology, October 2009, Frederick L. Greene, MD, identifies the traditional weakness of many hospital based tumor boards:

'most of these [tumor board] conferences...are based on a "show and tell" mentality rather than serving as treatment-planning conferences utilizing the expertise of the participating multidisciplinary experts....'

In other words, traditional hospital based tumor boards have not yet fulfilled the promise of better care or improved outcomes as a result of the assumed valued add of multidisciplinary engagement in cancer diagnosis and treatment. Apparently, business as usual 'silo-ed' medicine remains embedded in the care process even in the midst of what appears to be multidisciplinary consideration.

Why @TumorBoard?

@TumorBoard intends to uniquely address the convergence of several macro trends:

- The high cost of cancer treatment and parallel shift of a greater share of the total cost burden on to a resource constrained and often health literacy challenged patient.
- A heightened awareness of the need for increased clinical integration and care coordination across an otherwise silo-ed and discontinuous portfolio of specialties.
- Formal recognition that the upside of the multi-disciplinary engagement of cancer specialists (i.e., tumor board), has neither realized nor fulfilled its collaborative promise (see: [Tumor Boards \(Team Huddles\) Aren't Enough to Reach the Goal](#)).
- Emergence of an informed and engaged 'e-patient' (witness the launch of [SmartPatients](#)).
- A nascent yet growing pool of technology savvy, patient-centric cancer specialists who value peer based collaborative multidisciplinary care with active engagement of the patients under their care (See e-patients and the Society for Participatory Medicine).

Environment

The digital revolution enabled by smart phones, iPads or tablets, the near ubiquitous Internet connectivity, and an increasingly empowered healthcare consumer is changing the healthcare landscape. *'In the Creative Destruction of Medicine'*, Dr. Eric Topol illuminates the underlying macro shift:

'... until now the digital revolution has barely intersected the medical world. But the emergence of powerful tools to digitize human beings with full support of such infrastructure creates an unparalleled opportunity to inevitably and forever change the face of how health care is delivered'.

[further asserting]:

'Consumers will lead innovation in Medicine...it will not come from within the profession.'

While historically incident to if not wholly excluded from 'standing' in the consideration process characteristic of most hospital based tumor boards (if not the culture of medicine at large), the inclusion of the patient's voice as *principal or partner in the care process* has the potential to *reframe the doctor/patient relationship*.

We believe, within certain defined guidelines perhaps aided if not empowered by 'networks of micro-experts' such as the vision for Smart Patients, and informed by certain 'parameters of tumor board participation', the principal inclusion of an informed and 'skin in the game' patient in the diagnostic and treatment consideration process is likely to improve communications, engagement, and clinical adherence with a high probability to favorably impact treatment outcomes [and this is a hypothesis worth testing in its own right!].

As an open and 'platform agnostic' (i.e., bring your own device aka 'BYOD'), web based service, @TumorBoard enables participating ('member') physicians to connect in real time with a team of expert oncologists and diagnostic specialists to discuss select patient cases, or to support the clinical decision making process in otherwise challenging cases.

@TumorBoard addresses two major 'pain points' encountered today:

1. The patient's dilemma of how to access and process credible and timely health information that is both useful, and specific to their condition.
2. The iterative process that enables patients to become an ally and partner in their care is not supported by the payment paradigm, nor the pervasive medical paternalism characteristic of many physician practices or medical groups. Thus doctors generally do not have the time to spend with their patients, who often seek answers, guidance, if not hope elsewhere, i.e., typically on the Internet or via friends and family.

Unless one is practicing in a mature integrated delivery system with a tangible collaborative group practice culture, most physicians in independent practice do not have easy access to timely, specific and inter-disciplinary collaborative conversations on best practices, clinical pathways and evidence based medicine in cancer. Time is a physician's most treasured resource. In today's complex medical practice climate with many competing demands, the once common practice of attending hospital based tumor boards, with its presumptive benefit to the patient's care, seem more and more of a challenge to manage into physician workflow. Remote or virtual access to @tumorboard creates both workflow and time management efficiencies.

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Key milestones

- Secured Twitter account @TumorBoard.
- Acquisition of the root domain name: TumorBoard.com.
- Ownership rights to both TumorBoard.tv, and TumorBoard.co.

Market size

Unfortunately the incidence and prevalence of aggregate malignancy is a growth industry. Given the increasing longevity of the population cancer will remain a concern for 1 in 2 men, and 1 in 3 women in their lifetimes. According to the American Cancer Society, on the demand side, we see a total of 1,596,670 new cancer cases and 571,950 deaths from cancer are projected to occur in the United States in 2011. This equates to 1,567 deaths/day, and 4,374 new cases/day.

At an estimated 6% of total health care expenditures, the cancer care market represents approximately \$162 billions dollars in 2011.

@TumorBoard business model

Our thesis asserts better conversations, via more effective doctor to doctor, and doctor to patient communication centered on best practices, coordinated care, clinical pathways and empowering patients as partners in their care will favorably impact quality, cost and ultimately outcomes of cancer care.

We intend to demonstrate 'alpha site' proof of concept in a large community based oncology practice, while also seeking seed funding from a limited number of sponsors, strategic partners or investors. As we demonstrate efficacy of the business model and traction in the broader cancer care community, i.e., physician 'member' participation grows via case submissions and physician engagement in the conversation, we intend to solicit funding via sponsors and/or select targeted and appropriate advertising on the site.

Key risks and major competition

Risks: The major risk on the legal front is the privacy issue. Consultation with attorneys specifically involved with health care matters is anticipated.

However, another risk appears to be the failure to recruit sufficient early social media adopter physicians to engage in the process, thereby creating a supply/demand bottleneck.

Perhaps the biggest strategic risk is to maintain the informational objectivity and conversational integrity while pursuing one or several monetization strategies. Yet we believe given the potential scope, scale and appeal of this undertaking may be more suitable to grant a Gates or Robert Wood Johnson long term funding.

Competitors: There is minimal detectable competition to date, with no established player in the market with a comparable business model. The closest direct competitor is perhaps PeerCase.com, which appears to also be in their launch trajectory, and more limited in scope vs. our approach to bring patients actively into the conversation.

Most 'virtual tumor boards' are silo-ed to their respective hosts and not anchored to a social media platform per se which is a relatively new phenomenon in the market and only a modestly penetrated milieu by physicians albeit poised for exponential growth given adoption of iPads, tablets and smart phones thereby enabling a connectivity community unprecedented in modern medicine's history.

Exit strategy

We do not view this business opportunity as one for a quick market entry, penetration and early exit, as we see the model as a sustainable vision with long term community benefits. However, potential suitors could include: hospital systems, alliances or networks, pharmaceutical companies, physician practice management companies (PPMCs) or Pharmacy Benefit Managers. All of the above need and want to find ways to better support the needs of their physicians and support high quality, cost effective and evidenced based cancer care.

Our vision is to be underwritten by one or more organizations with an 'all in' commitment to community benefit, with vision and values of absolute ethics, health literacy integrity, and the clear recognition that the 'sick' American care system is on an unsustainable trajectory.

Our path to market

Our alpha site is embedded in a newly minted merger between two major community oncology practices in San Diego and Fresno California with a long standing commitment to clinical cancer care and clinical trials, as well as evidenced based integrative oncology. This entity, California Cancer Associates for Research and Education (CCARE, will internally validate our experience to date, and either demonstrate or disprove the widespread adoption potential and replicable nature of the @TumorBoard business model to sustain high performing team based cancer care.

We are soliciting select partners, sponsors or investors to minimally fund a \$250,000 'seed round.' The purpose of which is to build out @TumorBoard's vision, test of proof of concept, compensate the CEO & CMO for their time and sweat equity, obtain business model legal guidance, form an LLC, acquire essential platform infrastructure, subscription or premium services to brand outbound programming vs. continued reliance on less stable or secure so-called 'freemium' options.

Company Information

Primary contact: Gregg Masters

Company name: @TumorBoard

Company address: 2604-B EL Camino Real, Suite 305, Carlsbad, CA 92008

Year Company was founded: September 19th, 2009

Company websites: Tumorboard.com, TumorBoard.tv and TumorBoard.co

Co-Founder

Gregg A. Masters, gregg@xanatemedia.com, 760.458.1186

Education: AB, UC Berkeley, Psychology

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Past companies and positions:

Vice President, Payor & Provider Contracting, Texas Health Management Services (a unit of Texas Health Resources)

Masters & Associates, Principal/Owner aka IHOPathways

Vice President, Provider Contracting, Heritage Southwest Medical Group

Senior Associate Hospital Director, External Affairs, University of California Irvine Medical Center

CEO, LifeCare Network of Orange County (aka Plexus Healthcare Alliance)

Regional Director, Managed Care, American Medical International, California Division

Co-Founder

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Education: University of Michigan, BS, Zoology

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Internship and Residency in Internal Medicine, UCLA-Wadsworth VA Hospital

Chief Resident in Medicine, UCLA-Wadsworth VA Hospital

Fellowship in Hematology and Oncology, University of California at San Diego La Jolla VA Hospital

Board Certifications: Internal Medicine; Medical Oncology; Hematology

Current companies and positions:

CCARE San Diego

Medical Director, Research Institute, Palomar Health

Chairman, Investigational Review Committee, Palomar Health

Past companies and positions:

Private Practice in San Diego (North County), Hematology and Medical Oncology

Associate Medical Director / Principal Investigator, Scripps Cancer Center

Southwest Cancer Care, Hematology/Oncology Specialist, Escondido & Poway, CA

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