

## Star Trek and the Future of Family Medicine

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As the specialty of family medicine continues its efforts to redefine itself in the rapidly changing and increasingly technological health care environment, it is important to resist the temptation to focus disproportionately on self-examination and maintain efforts to better understand how physicians are viewed by the very people we hope to serve. Our collective culture's perception of medical doctors appears to be a complex amalgam of sometimes contradictory elements that are difficult to reconcile. Various attitude polls reveal an increasing level of dissatisfaction and loss of trust in our previously highly esteemed profession. Yet, most patients exclude their own personal physician from such criticism.<sup>1,2</sup> A hint of insight regarding what is clearly a multifaceted public view of the profession may be gleaned from carefully studying the shifting cultural icons drawn by the mass media, particularly television and film. Within that effort, the long running popular Star Trek series offers a unique opportunity to observe such changes over what has been for physicians 4 tumultuous decades.

The distinctive time frame of the Star Trek series and its focus on updating characters and storylines

with each reinvention sets it apart from other series of the era and makes it particularly interesting as a source of scrutiny. The original Star Trek first hit the airwaves in the 1960s during the height of the cold war, offering an image of the future in which humankind had overcome its divisions and united in a near utopian federation. Various versions of the series followed, and each adaptation included a physician as a character of major importance in the unfolding dramas. With every new edition, these physicians evolved through a succession of changes that reflected shifting cultural perceptions of the medical profession as we moved into the 21st century.

The first of the Star Trek physicians is the most famous. Dr Leonard McCoy describes himself in an early episode as "a simple country doctor." He is a deeply caring man who repeatedly demonstrates a willingness to place his patient's life and interests ahead of his own, even if the patient belongs to a completely different species. Dr McCoy's occasional crankiness cannot hide his caring spirit. We believe he is one of us and approachable. We even know him by his nickname, "Bones." He is capable of handling advanced technologies, yet shines as an unflinching patient advocate. Dr McCoy is the man of heart that resists and balances the Vulcan Spock's calculated logic. He is the ultimate space family doctor.

The 1980s saw the arrival of The Next Generation series and a new

type of television physician, the intelligent and independent woman. Dr Beverly Crusher is self-confident, beautiful, bright, thoughtful, and compassionate. Her character's role as lead physician and mother illustrated the changing occupational demographics of physicians and challenged the cultural adage that professional women cannot have it or do it all. Dr Crusher begins a shifting image toward extraordinary competence, even infallibility. Not only is she a terrific doctor and mother, but she is also capable of taking command of the starship and its crew when the other officers are on away missions. She is in all respects a superwoman.

Deep Space Nine followed as a space frontier adventure with complex political, social, and religious dynamics that introduced Dr Julian Bashir. He is a physician of uncommon passion and brilliance who is a tireless advocate for any and all odd life-forms encountered at the periphery of known explored space, whether they be friend or foe. Several seasons pass before his unusual intellectual capacity is revealed to be the result of illegal genetic engineering as a child. Not only does Dr Bashir expertly apply his amazing 24th century biological technologies—he is the product of those same technologies. He is the created superhuman who, despite regularly failing at affairs of his unenhanced heart, never fails at the complex medical challenges faced by his genetically manipulated brain.

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The Star Trek universe was widened further with the arrival of *Voyager*. A group of former adversaries are forced to cooperate when they are transported to an uncharted distant part of the galaxy. In this version, the ship's physician is a sophisticated computer-generated hologram that has no name. The "Doctor," as he is called, is himself a form of highly advanced technology that is designed to imitate a human being. Indeed, he effectively mimics some distinctively human qualities, including compassion, self-assurance, integrity, and even a touch of arrogance. This physician cannot conceive of making a mistake since it is incompatible with his programming. In the "Doctor" we see the advent of the anti-McCoy—a physician with no name (no less a nickname) and with no actual heart, whose very existence depends on the calculated logic that defines a computer program.

These physicians illustrate a rapidly morphing image of doctors who are becoming less human and more technological and infallible. They evolve from the old country doc, McCoy, to the extraordinarily proficient Dr Crusher, through the genetically enhanced Julian Bashir, and ultimately to the sophisticated computer program with no name. The perception conveyed here is that the medical profession will reach its zenith as unpredictable human emotions and imperfections are eradicated. Technological advancement offers the best future hope for successfully healing disease.

The fifth Star Trek series, *Enterprise*, though the most recently created, harkens back to the early years of space exploration prior to the original program. This latest version of the television series includes a physician who is not human at all. Dr Phlox is a Denobulan, an alien species that requires only 6 nights of sleep each year, ideal for maximum availability for patient care.

He is exceptionally considerate and thoughtful, excited by diversity and new cultures, and always projects a cheery disposition. He manages a biological garden and zoo that often serve as sources of medicinal therapies for his patients. Thus, he is the prototype of the multicultural homeopathic physician of the future, comfortable with technology but knowledgeable regarding the more natural means of healing. Dr Phlox reflects the swelling backlash against failed technologies that presently lead so many to experiment with nontraditional or "natural" remedies. But the larger point here is that it takes an alien to bring back some balance between heart and technology to the profession.

These characters are the products of fertile imaginations and indeed are in all aspects fictitious. Yet, they represent an interesting mix of both the present perceptions and future hopes of their creators and their audience. A picture emerges of physicians who become more intellectual and calculating and less encumbered by human emotions and imperfections. They become less like the people they care for and less familiar, perhaps echoing the public's loss of a sense of the intimacy of the doctor-patient relationship. These doctors literally come to embody the experience of personal alienation that patients feel within the present health care system. On the other hand, by using the extraordinary technologies of the day, the Star Trek physicians rarely fail in curing the most advanced and mysterious ailments. In this way they reflect the often unrealistic expectations of today's patients regarding medicine's ability to cure disease, an attitude that leads to mounting frustration for all involved.

Family medicine began as a specialty during the days of "Bones" McCoy and is attempting to redefine itself during the days of Dr Phlox. In between, it has struggled on

occasion to maintain its relevance in an increasingly impersonal and technological health care delivery system. The doctors of Star Trek give pause to those of us who believe in the sustained importance of family medicine.

Yet, we still believe. In both our hearts and minds we trust that family medicine offers the antidote to the palpable sense of disaffection and the false promise of technological infallibility suggested by the physicians of this and other contemporary television series. Perhaps family medicine can take some solace from the one consistent thread uniting all the imagined doctors of Star Trek. Despite the escalating technological focus seen with each subsequent version of the ships' chief medical officers, a careful look at the various physicians of the *Enterprise* reveals all to be generalist doctors with broad healing skills, who take care of a wide variety of ailments in persons of all ages, sexes, and even species and who are uncompromising in their selfless commitment to their patients. Technologies change, but this fundamental image of the physician remains one that appears to continue to resonate with the public we wish to serve. Our specialty would be wise to remember this set of enduring characteristics and, just maybe, the discipline of family medicine will remain alive and well through to the 24th century and beyond.

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