

Practical Strategies to Assess Value in Health Care

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*To my family, for all that you do, Emily,
Vieva, Emmett, and Kipp.*

Preface

I have been deeply entrenched in the assessment and analysis of various components of health care for over 20 years. From the late 1990s to today, I have witnessed first-hand the shift toward “value-based” care in policy and reimbursement, but also in how individuals and organizations have come to view their role in the vast and complex machinery we know as the healthcare industry. Through my work with clients and personal research, I have come to notice significant gaps in the resources available to healthcare professionals who seek to assess value, financial or otherwise. This is lamentable, given that the great majority of healthcare professionals are motivated, hardworking individuals who are passionate about improving the quality and value of health care.

Almost without exception, the individuals I have encountered in this industry are committed to their own improvement and open to learning new skills, so that they may be better equipped to tackle the many challenges faced when attempting to change care delivery systems. Unfortunately, there exists a paucity of information or guidance when needing to plan, execute, and summarize assessments of the value of an intervention, product, device, or process.

I wrote my previous book, *Return on Investment for Healthcare Quality Improvement*, for healthcare professionals needing to quantify the financial return of particular decisions or quality initiatives. The book compiles the ideas and techniques I have used to help clients secure funding or justify particular activities and provides a general structure that can be applied to a variety of situations, settings, and motivations. The feedback I have received suggests that it was successful in beginning to fill some of the gaps in value-related resources available to healthcare professionals.

However, I came to confirm through subsequent conversations with individuals across the spectrum of care (some of whom had read the book, some who had not) that there remained a sizable gap surrounding the assessment of value more generally. Discussions with clinicians, patient advocates, administrators, policy makers, and private business owners revealed a universal craving for more specifics regarding definitions and interpretations of value. Given the increasingly important role value plays across the landscape of health care in the USA, a shared understanding

of how to think and talk about value has never been more critical. Yet, the variety of perspectives (patients, providers, clinicians, policy makers, etc.) from which to view value and the myriad of motivations to assess value make it impossible to establish a single, universally applicable definition of value. Instead, we need to learn how to *think about* value, so that when faced with a specific situation or decision, we can develop an appropriate definition and identify the relevant benefits, costs, and metrics for our unique circumstances.

This book presents a framework to help guide the development and execution of informative value assessments. Through examinations of concepts and theories from network science, economics, and behavioral science, I present key components to consider and address as one establishes an appropriate value definition and the elements needed to quantify and describe it. Using a common framework can homogenize how assessments are performed and as a result make them more comparable. As with my previous book, the tools and ideas presented in the following pages were born from my work with clients. I have used these techniques to help clients determine and demonstrate value, which in turn has helped them make a business case for their intervention, device, or product to funders, investors, customers, or organizations they want to partner with or be acquired by.

I wrote this book with a variety of healthcare professionals in mind. Clinicians, quality improvement implementers, facility administrators, board members, policy makers, device manufacturers, med-tech/digital health companies, investors, and others will all find relevant concepts and techniques that will enhance their ability to assess, discuss, and recognize value. While the financial implications of increasing revenues or decreasing costs are essential to the viability of healthcare infrastructure and care delivery systems, the value of health care includes nonmonetary benefits like quality of life, patient experiences, mental and emotional well-being, security, equity, hope, and innumerable other things. Therefore, the scope of this book is as broad as possible, encompassing all types of value one could imagine. It is my sincere hope that in the pages that follow you will find insight and inspiration for your own value assessments.

I am appreciative to the many individuals and organizations who have allowed me to assist them with their value-related needs and have been willing to engage in conversations about value. I would like to explicitly acknowledge a few individuals, including Andrew Kopolow, Becca Etz, Laurie Knutson, John Nelson, and Adan Becerra, for their thoughts and insights regarding the topic of value. I owe a particular debt to Rebecca Smith for her careful reading and insightful feedback on a preliminary draft of this book. And of course, I would be remiss if I did not acknowledge my wife, Emily, for her unwavering support and confidence in this and all endeavors.

Saint Paul, MN, USA

Craig A. Solid

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About the Author

Craig A. Solid, PhD is an independent consultant who is the owner and principal of Solid Research Group, LLC. He helps a variety of organizations, including device and digital health companies, demonstrate and communicate the value of their product, device, process, or solution. He has more than 22 years of experience in health care and has co-authored over 60 peer-reviewed manuscripts and multiple books. He regularly gives seminars and guest lectures on value in health care and value assessments. His most recent book, *Return on Investment for Healthcare Quality Improvement*, is available from Springer (2020). Dr. Solid lives in St. Paul, Minnesota, with his wife and three children.

Abbreviations

ACA	Affordable Care Act
ACO	Accountable care organization
BCR	Benefit-to-cost ratio
CAS	Complex adaptive system
CBO	Community-based organizations
CEA	Cost-effectiveness analysis
CLABSI	Central line-associated bloodstream infection
CMS	Centers for Medicare & Medicaid Services
CUA	Cost–utility analysis
ED	Emergency department
EHR	Electronic health record
FFS	Fee-for-service
ICER	Incremental cost-effectiveness ratio
MACRA	Medicare Access and CHIP Reauthorization Act
QALY	Quality-adjusted life year
RCT	Randomized controlled trial
ROI	Return on investment
TPHO	Third-party healthcare organization