Purpose: Multidisciplinary antimicrobial stewardship programs (ASP) are recommended worldwide to improve patient outcomes and address escalating antimicrobial resistance. Core ASP team members should include both infectious diseases (ID) trained physicians and pharmacists. In the United States, there are not enough ID trained physicians or pharmacists too meet the goal of ASP in all hospitals. In addition, several other countries do not offer advanced ID training for pharmacists. To overcome the shortage of infectious disease (ID) trained clinicians we developed an online antimicrobial stewardship training program to improve the ID knowledge and skills necessary for clinicians to provide an ASP.

Method: Making-a-Difference in Infectious Diseases (MAD-ID) is a US non-profit entity founded in 1998 with the sole mission of providing continuing professional education in the area of ID pharmacotherapy. In 2010, MAD ID introduced a basic ASP that is now offered online. Currently, two programs are offered, basic and advanced. There are three components to the basic program: two internet learning modules covering basic concepts, the second of which includes optional teleconferences with faculty to address participant questions as well as application and implementation issues, and finally, a practical component/exercise in which the participant demonstrates the ability to apply the knowledge in the healthcare setting. Upon completion of the three components a certificate of completion is awarded, and applicants receive 19 hours of ACPE continuing education credit (1.9 CEU). The advanced program is designed to meet the ongoing educational needs for practitioners who have ASP experience and/or basic education and skills training in this area of practice. Topics include stewardship application in specific settings and patient populations, collecting and analyzing stewardship metrics, and novel approaches to promote stewardship programs and initiatives. Upon completion an additional certificate of completion is awarded.

Results: To date 349 and 60 have graduated from the basic and advanced ASP, respectively, and received certificates of completion. Over 800 more healthcare providers are currently enrolled in the basic ASP and 128 in the advanced ASP. Clinicians from around the world have completed the program including individuals from the USA, South Africa, Saudi Arabia, Lebanon, Singapore, Ireland, Hong Kong, Canada, and Australia. Participants include pharmacists, physicians, infection control practitioners, microbiologists, industry-based science liaisons, and nurses.

Conclusion: These programs and especially the basic online ASP version are providing global stewardship training opportunities to a multidisciplinary group of healthcare providers. Internet based ASP programs provide education to a worldwide audience of healthcare providers.