

Key points from Panel Discussion Facilitator/Discussant: Avani Modi, Ph.D.

- Non-adherence is a multi-dimensional problem that cuts across diseases and affects individual patients, families, healthcare providers, insurers, pharmacists, employers, and health-care institutions.
 - Average rates of non-adherence are approximately 50% across conditions and the impact of non-adherence has been estimated to be 300 billion dollars each year
- The impact of non-adherence is significant resulting in:
 - Increased morbidity and complications
 - Increased mortality
 - Unnecessary changes to treatment plans that may be avoided with good adherence
 - More clinic-based resources and personnel
 - Increased drug resistance
 - Increased hospitalizations and ER visits
 - Absenteeism and Presenteeism
- We have underutilized excellent resources to date, including our pharmacists, health educators, and case managers
- We do not need to re-invent the wheel as there are many resources that currently exist (see Mary Beth's materials). Dissemination of these resources and tools to assess and treat adherence is critical to changing outcomes.
- Barriers to adherence occur at the individual, family, hospital, healthcare team, and larger systems level.
- We need to break down the silos in which we work as interdisciplinary work is the first step to improving adherence
- We must consider the cultural context in which our families live, including language, literacy, and their unique barriers to adherence. We will not know this unless we ask.

- Feedback loops are a necessary component of intervention, both for the patient and the physician. If patients could visually see their own adherence data and this is fed back to the physician, it would highlight when and where we need to intervene
- Knowledge is necessary but not sufficient to improve adherence. However, ensuring that patients being discharged from hospitals understand their post-hospitalization instructions and have follow-up is a critical step in improving adherence for these patients
- There are several research studies that can help us to identify both empirically supported adherence measures and interventions to improve adherence within pediatric populations that may serve as excellent guides:
 - Quittner, A. L., Modi, A. C., Lemanek, K. L., Ievers-Landis, C. E., & Rapoff, M. A. (2008). Evidence-based assessment of adherence to medical treatments in pediatric psychology. *J Pediatr Psychol, 33*(9), 916-936; discussion 937-918.
 - Kahana, S., Drotar, D., & Frazier, T. (2008). Meta-analysis of psychological interventions to promote adherence to treatment in pediatric chronic health conditions. *J Pediatr Psychol, 33*(6), 590-611.
 - Hood, KK, Rohan, JM, Peterson, CM, & Drotar, D. (2010) Interventions with adherence-promoting components in pediatric type 1 diabetes: meta-analysis of their impact on glycemic control., *Diabetes Care, 33* (7), 1658-64.