Cody Arnold MD, MSc, is an Associate Professor at UT Houston Medical School in the Department of Pediatrics and Division of Neonatology.

Dr. Arnold is neonatologist with a Master’s degree in epidemiology and biostatics from McGill University. Dr. Arnold joined the UT Houston Medical School faculty in 2009 after completing a Graduate Certificate degree Bioinformatics at the UT Health Sciences Center School of Bioinformatics. His primary research interests are in applying the methods of clinical epidemiology to evaluate information systems, particularly information systems imbedded in or linked to electronic medical record systems. A related interest is in developing information systems that capture data for clinical research, quality improvement, and quality monitoring, as well as supporting the clinical care of individual patients.

Currently Dr. Arnold is working with collaborators at McMasters University and Baxter Healthcare to develop and test a web service provider order entry application for nutrition orders in newborn intensive care units. Building on a previously implemented standalone system, the team is working to create a 2nd iteration system that integrates enteral and parenteral nutrition and includes (1) clinical decision support (2) a Managers’ Module where local managers will set local defaults and resolve semantic and other meta-data issues, allowing implementation across NICUs and EMR systems, and (3) an analytic data repository designed to support data sharing and research. Prior to implementing and testing in an alpha site NICU, the order entry system will be tested in a web-based study using simulated clinical scenarios. The longer term goal is to test the system against clinical outcomes in a network of NICUs.

Dr. Arnold is also actively engaged in the management of a randomized controlled trial of cycled phototherapy in extremely low birth weight newborns. This pilot study, initiated by UT Houston’s Dr. Jon Tyson, and also enrolling patients Stanford’s Lucille Packard Children’s Hospital, is designed to motivate a larger multicenter randomized trial comparing continuous phototherapy (usual therapy) to phototherapy administered for 15 or 30 minutes per hour. Although phototherapy has generally been considered harmless, the data from previous randomized trials involving extremely low birth weight newborns suggests the possibility of unrecognized toxicity in the smallest and most premature newborns. The preliminary data from the pilot RCT currently underway suggests that cycled phototherapy is quite effective in controlling bilirubin levels in extremely low birth weight newborns - as previous trials have demonstrated effectiveness in term newborns – but more data is needed. However, it will be necessary to enroll more patients in a larger trial to demonstrate the hypothesized protective effects of cycled phototherapy on clinical outcomes.