Purpose: The clinical imaging infrastructure has been designed for the consistent execution of standard-of-care imaging examinations. Many imaging protocols for clinical research, however, have unique requirements that may burden the established infrastructure. Our purpose was to develop a solution to the many imaging demands and challenges presented by clinical research.

Methods: We have created the Human Imaging Research Office (HIRO) at our institution. The HIRO is responsible for coordinating the acquisition, collection, analysis, and maintenance of images and related data associated with clinical research studies involving human subjects. The purpose of the HIRO is to coordinate, harmonize, and streamline the imaging aspects of clinical research, so that these non-standard examinations can be performed as required by the study protocol. In effect, the HIRO is becoming the institutional resource for a broad spectrum of research imaging needs. The activities and services of the HIRO include site validation and image quality verification, development of standardized research-specific requisition and reporting forms, scheduling, implementation of research billing codes, study-specific image-based measurements, collection of customized image databases, and distribution of anonymized images to researchers and study sponsors.

Results: The HIRO has helped facilitate the acquisition of images for clinical research for 117 active, pending, or recently closed clinical research studies. These clinical research studies are being conducted by 60 unique principal investigators across 14 different sections and departments within the Medical Center. The HIRO has filled over 650 requests for deidentified images, accounting for over 42.3 million images.

Conclusions: Imaging for clinical research often has requirements that differ substantially from those of clinical imaging. The complex infrastructure for standard-of-care imaging typically is stressed by the unique technical and administrative needs of a research protocol. The HIRO is able to respond effectively to the dynamic imaging needs of clinical research.

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