Purpose: To describe the role of rehabilitation therapists—physical therapists (PTs), occupational therapists (OTs), and their assistants—in inpatient fall risk reduction after participating in a hospital-wide interprofessional fall risk reduction program.

Methods and Materials: We used a mixed methods approach (both quantitative and qualitative methods) to explore this topic. Seventeen small rural hospitals that had participated in a two year interprofessional team-based fall risk reduction program reported 334 fall events that occurred from 8/1/12 – 7/31/14. Data elements from fall reports were quantitatively analyzed with SAS/STAT software V.9.4. Data included patient age, whether the fall was assisted or not, and level of harm on a 5 point scale (1=death, 5=no harm). The fall event data were analyzed using PROC GLIMMIX (generalized linear mixed model) to model the odds ratio of an unassisted fall resulting in injury while adjusting for patient age and clustering of fall events by hospital. We used qualitative methods to describe therapists’ perception of their role in fall risk reduction, including the provision of staff training in safe transfers and mobility intended to increase the likelihood that a fall is assisted. Seven PTs, one PT assistant, two OTs, and one certified OT assistant from nine project hospitals participated in three semi-structured focus groups and one interview via telephone Conference Bridge. Digital recordings were transcribed verbatim and analyzed using NVivo 10, a qualitative data analysis software program. We used an integrated approach to coding—themes were developed both deductively from existing theoretical frameworks of Donabedian and the multiteam system, and inductively from concepts that emerged through iterative review of the data. Two researchers (KT and KJ) used constant comparative analysis to ensure that codes were appropriately assigned to the textual data. Following open coding of themes, we conducted axial coding by conducting queries to identify relationships between structures and processes intended to decrease fall risk. We used member checking to establish credibility of our results.

Results: The adjusted odds of an unassisted fall resulting in injury were nearly 3 times greater than the odds of an assisted fall resulting in injury (OR=2.9, 95% confidence interval =1.5-5.5). Open coding of textual data revealed that therapists participated in fall risk reduction at two levels of the multiteam system: the coordinating team that is accountable for the structures and processes of fall risk reduction at the organization level and the core team that provides patient care at the unit level. Axial coding of textual data revealed that therapists most strongly associated their coordinating team role with contributing to team orientation, team structure, and quality improvement in the hospital. Team orientation is characterized by mutual respect, increased task involvement and sharing of information, and valuing the team goal over individual goals. As members of the coordinating team, they shared knowledge of safe transfers and mobility during formal training of staff from other professions, role modeled the use of evidence based practice to select standardized fall risk assessments, and demonstrated critical thinking based on pathophysiology, biomechanics, and balance to determine fall etiology. The development of team orientation among coordinating team members resulted in improved communication among core team members. One PT commented: “Now that we’re a part of the [coordinating] team … we are working with nurse supervisors and directors from across the hospital … they can help communicate to their nurses the benefit of conversing with therapy, you know, on individual patients every day.” Thus, therapists most strongly associated their traditional core team role with improved communication with nursing, which contributed to the desired outcome of safe, patient centered care. As one therapist noted, “…one of the things that we’ve tried really hard to do is to improve the communication with the nursing staff so that they understand that we have the skillset to help solve some of those problems that they run into when they have patients that are difficult to transfer….They rely on us a little more now to give them advice as to how to manage a patient better or what is safe for them and the patient.”

Conclusions: Appropriate assistance during transfers and mobility is associated with decreased risk of fall-related injury. Rehabilitation therapists contributed to the organizational goal of fall risk reduction by “playing a more valuable role” as members of the coordinating team. This role included formal staff training in safe transfers and mobility and role modeling evidence-based practice and critical thinking. Improved team orientation within the coordinating team facilitated communication within the core team, which may have increased the likelihood that safe transfer and mobility skills learned by other professions during training would be used in the work environment. Additional research is needed to test the hypothesis that formal transfer and mobility training by rehabilitation therapists who are members of a fall risk reduction coordinating team decreases injury due to falls. This hypothesis is consistent with the emergence of assisted falls as a quality measure.