Sleep is an essential biologic and physiologic process that is vital for maintaining or achieving optimal health outcomes. Care requirements in hospitalized patients frequently result in nocturnal disruptions that impact sleep quality. This exploratory, retrospective study aimed to identify and quantify nocturnal care disruptions in patients undergoing hematopoietic stem cell transplantation. A total of 1,642 nocturnal care interactions occurred during 160 patient nights of data collection. An average of 41 nocturnal care interactions occurred per patient. Most occurred from 12–12:59 am and 4–4:59 am. Most patients (73%) had sleep disturbance recorded in their chart by nurses, but physicians documented sleep disturbances for only 28% of patients. Care practices may be modifiable to promote sleep in the hospital setting.