The cost of complications of Central Venous access Devices (CVADs) in today’s health care setting is creating financial burden, increasing the expenditures of resources, and consuming the time of health care providers to resolve. As the roles of nurses continue to evolve, nurses may be in a position to recognize and prevent many of these complications. This paper proposes a conceptual model to address the issues related to caring for and monitoring CVADs, while reducing complications and increasing quality of patient care.