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ABSTRACT

The burden of chronic diseases management is tremendous. Statistically chronic diseases are one of the biggest causes of death world wild. The medical community, in addition to academic medical journals, now accept treating cancer as a chronic disease. The rate of cancer diagnoses is rising; the population of cancer survivors are increasing globally accordingly. Subsequently, this cohort of patients, now considered, as a patient with cancer as a chronic disease, is a growing demographic. This "new" type of patient now needs to be looked at differently.

Due to the multifaceted nature of oncology services, a multi-disciplinary team approach is committed to the care of every cancer patient from diagnosis to treatment to survival and end of life care. Emphasis is beginning to be placed on intensive user and computer interactions to resolve many problems associated with the fragmentation of care. The successful application of Information Communication Technology (ICT) enhances communication between provider and patient, provider and provider, and provider and system, thus facilitating in the improvement of coordination, and the quality of care delivered.

Exhibited in this dissertation is a systematic approach for developing a Software Requirements Specification (SRS) for user-centric software in an Oncology setting. The document conforms to the well-recognised IEEE software requirements process model. During the process of creating the SRS, functional requirements derived from the literature and semi-structured interviews with oncology staff were presented according to the IEEE template.

A member of the hospital IT team, a consultant, and a clinical nurse specialist evaluated the SRS document against requirements outlined in the interviews in addition to required functionality. The SRS document was validated against the IEEE SRS template and an iterative process was used to refine the document.