Data collection using a computer interview

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The ICU-Talk project is a three year collaborative research project developing and testing a computerised communication aid for intubated patients (MacAulay et al, 2001). One of the many challenges faced by the project has been to provide the patient with suitable phrases which are stored in the communication and readily available for patients to speak out.

A core database of phrases was identified by asking nursing staff for examples of phrases, sentences and questions that ICU patients frequently ask. Patients in ICU who were alert and attempting to communicate were the observed by two researchers. Results from these observations revealed that although patients do communicate some basic needs and wants, more often they ask about personal issues e.g. "Where is Sheila?".

A quick and easy method of collecting some personal information about the patient was required. This data then had to be added to the computer's database. A basic computer interview was designed to collect this information (Peiris et al, 2000). The interview has been designed to be completed by a relative or close friend with out any training being required. The interview was designed and developed by the multidisciplinary research team, which comprises of a software engineer, a speech and language therapist and a specialist ICU nurse.

It is felt that the use of computer interviewing as a way of collecting patient specific information quickly and easily could have a wider applications in patient care. The presentation will discuss the development and implementation of the computer interview as well as possible applications of computer interviewing in patient care.

F. MacAulay, A. Judson, J. L. Arnott, M. Etchels, S. Ashraf, I. W. Ricketts, J. K. Brodie, N. Alm, A. Waller, A. Warden, A. J. Shearer and B, Gordon, "Design considerations for a communication aid for intensive care", in: *IEEE International Conference Systems, Man and Cybernetics (Tucson, Arizona, USA, 7-10 October 2001)* pp.244-249.

Peiris, D. R., Gregor, P. & Alm, N. (2000) "The effects of simulating human conversational style in a computer-based interview." In: *Interacting with Computers 12(6) (2000) (pp.635-650.)*