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P187 -‘Smarts’ a Virtual kidney assistant: Delivering high quality sustainable healthcare by empowering patients and healthcare teams. Co-produced with patients and healthcare professionals

Dr Arvind Nagra[1], Dr Alejandra Recio-Saucedo[2], Dr Anne-Sophie Darlington[2]
[1]Southampton Children's Hospital, Southampton, United Kingdom, [2]University of Southampton, Southampton, United Kingdom

Background. Patient empowerment, central resources of information and changing healthcare professional behaviour are widely recognised as essential components of sustainable high-quality, patient-centred healthcare systems particularly in helping to address the expanding burden of chronic diseases. Where possible patients are expected to take more control over their illnesses or treatments and the multidisciplinary teams (MDTs) are expected to encourage or ‘empower’ them to do so. A key element of patient empowerment is enabling patients/carers to understand their condition, gain the knowledge and skills necessary to help manage their condition and actively participate in making decisions about their care.

Many of the issues facing a person with a long term condition are generic and not dependent on age or speciality. This allows for the development of shared of resources and solutions.

One such solution is the use of Artificial Intelligence to provide a virtual on-line assistant which:
helps provide answers to common questions in a format that suits the patients/carers/healthcare professionals
speciality Associations are the gatekeepers of the information being shared. This reduces duplication of effort by each Trust and provides a governance system for the quality of the information.

Young people and healthcare professionals at a UK Children’s Kidney Unit -working with IBM interns helped co-produce a Virtual kidney assistant -Artificial Intelligence(AI)/machine learning prototype called ‘Smarts’. The prototype can be found at
https://assistant-chat-us-south.watsonplatform.net/web/public/9c0e1e5a-b6d7-4860-a92e-96d51425e441

Common questions asked by patients and HCPs were populated into “Smarts’. The answers to the questions were populated from approved resources (*Ready Steady Go- patient video www.uhs.nhs.uk/readysteadygo, **Pregnancy and chronic kidney disease- Patient information: Rare Renal Disease + Kidney Care UK Care UK, Renal Association.

Method: During a national renal study day, healthcare professionals, charity organisations and patients were given a live demonstration of the ‘Smarts prototype and shown a youtube video of the prototype https://www.youtube.com/watch?v=f817nTQBcTc .
The following questions were typed live into a ‘Smarts’ prototype.

what is transition (*)
what are the risks of pregnancy in kidney disease (**)
when should I get pregnant with kidney disease (**)
The answers were seen by the audience.

The audience (N= 65) were then anonymously polled and asked "Should we develop AI (Smarts) repository for all to use" - "to help empower patients, families and healthcare professionals, help HCPs sign post to approved up to date resources, save reduplication of information and help change healthcare behaviour?"

Results: 100% responded yes- we should develop 'Smarts' an AI repository for all to use to help empower patients and HCPs and change practice.

Summary: There is a a need to develop 'Smarts' a virtual assistant further to help empower patients, develop central resources of information and change healthcare behaviour. 'Smarts' would help deliver on the recommendations of the 'All parliamentary Group' (2014) for the delivery of high quality, sustainable healthcare globally. Further work needs to be done in this area.