

# Ascites Management

## Technology-enabled care services: novel method of managing liver disease

### What was the Challenge?

Alcohol-related liver disease (ARLD) accounts for 37% of the patients who die from liver disease. Moreover, health professionals appear to have a pessimistic attitude toward these patients because ARLD is a self-inflicted illness and a lifestyle disease. A number of documents addressing the care for this group with recommendations to improve outcomes have been published. A notable document is the National Plan for Liver Services UK (British Association for the Study of the Liver (BASL) and British Society of Gastroenterology (BSG), 2009), which concluded that higher quality services equate to cost savings. However, engaging with this client group can be difficult; despite the need for treatment, there are poor attendance rates by those with alcohol problems. Concern – a leading national charity working on alcohol issues – has identified that the rate of non-engagement in alcohol treatment is as high as 94% in dependent drinkers (Alcohol Concern, 2010). This begs the question: should we keep offering the same failing methods of intervention to a disengaged group?

It is essential that new ways of working are explored, such as the use of technology that allows the patient to be discreet, accessible, and feel less stigmatised.

### What we did

The ARLTC nurses were made aware of a local initiative to use a system called 'Florence' or Flo. This is an NHS-owned simple telehealth solution designed to provide advice and support to patients in order to help them manage their own conditions better. A pilot Telehealth study of follow-up services for patients with ARLD, particularly ascites, who are cared for by a team of alcohol-related long-term condition nurses was initiated using Flo.

This simple approach required patients to take their weight readings and report their units of alcohol, texting them to a secure server for immediate automatic analysis and individual review. Patients use their own mobile phones, and all the texts are free of charge. Parameters are set individually, and Flo's response to the patient depends on the reading sent in. If, for example, a patient's weight has increased, Flo sends a message to the patient asking him/her to contact the team immediately, and a change in treatment can be administered early before full exacerbation occurs. Flo puts the patients in control and enables them to take responsibility for their condition (Public Health England, 2014). A contract is formalised through Flo, as the individuals know their responses are recorded and available for the clinical staff to view anytime.

### Who was involved?

Nottinghamshire HealthCare Trust ARLD nurses in County Health Partnerships and the Nottinghamshire Assistive Technology Team (NATT)

### What was the impact?

There were 12 participants in this service improvement study. This simple telehealth strategy was met with high levels of patient satisfaction, with a small cohort showing indications of feelings of control and support.

One case wherein Flo identified sudden weight loss in a client highlighted an unexpected reason. When the patient was in hospital, she had been prescribed 400 mg of spironolactone. On discharge, the medication was reduced to 200 mg. A week after discharge, the Flo results showed that she had lost an unexpected amount of weight. This prompted the nurses to visit the patient, who was found to be becoming increasingly confused. It transpired that she had continued to be taking the 400 mg, claiming the ward had not told her of the adjustment. The nurses were able to monitor her vital signs, liaise with the ward, and make sure she was now taking the right dose. This was a simple but effective method, and it definitely saved a hospital admission. Another patient has found Flo to be a psychological help: 'It keeps me on the straight and narrow. Like reporting in to the diary room of Big Brother' (46-year-old female ascites patient). From the case study examples, the results supported not only the patient but the service's ability to monitor and intervene when alerted. The system has shown true potential in engaging with this group, helping them to self-manage. One participant unexpectedly stopped texting in the readings. Flo alerted the clinicians, who discovered that the individual had started drinking again, so noncompliance was identified early. Nevertheless, the majority of patients want empowerment and have the ability to improve their lives through self-management.

### What are the next steps?

This management approach should thus be considered for widespread implementation for clinical management of ascites and a further number of patients included to evaluate its effectiveness with a larger group. The Nottinghamshire University Hospital Hepatology service are soon to expand Flo's use in the acute setting and share data with the community ARLD teams on shared patients. The target is the day case unit where paracentesis takes place. This will involve a larger cohort and full evaluation will be published in 2016.