

# Telemedicine Support to Home Renal Dialysis Patients

StEAM Adoption Study for Lancashire Teaching Hospitals NHS Foundation Trust

## Tele Renal Dialysis:-

- Video-as-a-service has been successfully used for nurses to remotely support home dialysis renal patients in Cumbria and Lancashire.
- The Cumbrian Centre for Health Technologies (CaChET) at the University of Cumbria was engaged to undertake an Adoption Study using their Stakeholder Empowered Adoption Model, an approach that involves engagement with all key stakeholders to understand barriers to and enablers of adoption.
- Our remit was to understand, from the viewpoint of stakeholders, what are the barriers to and benefits from using the renal telemedicine service and then to identify these barriers and benefits to managers and commissioners with the aim of aiding adoption of the technology.

## Background:-

- The regional Renal Centre at Lancashire Teaching Hospitals provides treatment and care for patients suffering from kidney problems across Lancashire and South Cumbria.
- Dialysis patients usually have to travel to hospital up to three times a week where each dialysis session can last up to four hours at a time.
- Taking into consideration journey times required for travel to and from the hospital, attending renal appointments in hospital is time-consuming. For some patients due to geographical location, it can take a whole day.
- Home dialysis can be an attractive alternative for some patients, if they have the resources and capabilities required.

## Benefits to Patients:-

- Increased confidence through continuing support, leading to improved ability to self-manage;
- More likely to continue with home dialysis as support is more available;
- Improved patient experience, quality of life;
- Patient empowerment.

## Benefits to Staff:-

- Alleviates worry for the nursing team, leading to better job satisfaction, improved morale and quality of working life

## Benefits to the renal service

- Enable more efficient use of staff time
- Avoidance of unnecessary maintenance visits;
- Reduction in emergency and unplanned hospital attendances



## Summary findings:

- There is very strong qualitative evidence that telemedicine is making a strong impact on patient experience, empowerment and staff efficiency.
- Quantitative evidence is hard to uncover and needs some dedicated work to bring this out, but anecdotally there are significant time savings for critical front line staff.
- The emerging evidence is that telemedicine has the potential to enable more renal patients to be offered home haemodialysis, in line with clinical best practice and NICE guidelines.

## Recommendations:-

- Recommendations for improvement of technology
- Enable multiple lines for communication
- Resolve problems/delays in installation
- We strongly recommended the service moved as quickly as possible to using integrated digital patient records that can be updated from any device at any location by any staff member. This would not only help in business case development for this and other service improvements, but it would reduce staff workload.

