

## RENAL UNIT GREEN PROJECT

Green Nephrology

Our Green Project was developed in 2009 with the participation of Renal Unit staff and patients covering a range of mitigation and adaptation issues.

SAP



Using a classic resource efficiency method the team quickly identified carbon reduction opportunities, prioritised them, and moved into action. By the end of the first year they achieved:

- ☺ An improved workplace with more time nurse patients
- ☺ A reduction in healthcare acquired infections
- ☺ 'Cost avoidances' running at £32,000 per year
- ☺ Carbon reductions running at approximately 33 tonnes CO<sub>2</sub> eq. per year.
- ☺ Clear improvements in the patient experience with reduced waiting times, fewer aborted journeys and more patient self-care

### PROGRAMME

Workshops introduced staff to climate change issues and the use of resource efficiency methods to reduce carbon. Led by Renal Unit Manager Simeon Edwards the team took the action plan developed in these sessions and integrated it into the normal management of their unit for continuous improvement. The carbon reduction actions are now regularly reviewed and updated as part of normal unit management. Resource efficiency tools are used as needed to get to the root of issues, identify possible actions, and to manage change positively.

#### ACTIONS Simple actions were attempted first:

1 Waste sandwiches were reduced from 35% to <5% by involving patients in establishing a new sandwich menu, improving choice and avoiding costs of £4,000.

3 Encouraged by this success the unit team decided to tackle aborted ambulance bookings, aiming for zero %. The team worked with the ambulance service to synchronise treatment times. Within a few months the cost of aborted journeys reduced from £1,500 a month to £0.

4 To reduce stress in the workplace the team undertook an analysis of the balance between staff availability and the peaks and troughs of patient activity. This led to some rescheduling which released more time to care, leading on to best practice in infection control, and improved staff attendance.

5 A renal unit uses a considerable amount of disposable kit and pharmaceuticals. Bicarbonate cartridges were changed leading to a reduction in packaging, chemicals and transportation frequency.

2 After full consultation with patients, linen use was reduced by 70%. Some patients preferred to bring their own blankets, and the unit stopped using white sheets for patient's chairs. Avoided costs £4,800 and quite a good carbon saving too.

**WHAT DOES IT FEEL LIKE?** "It was very encouraging. We have taken on this project and are attending to our 'green' issues. It gives my job satisfaction." Katherine Hope, Housekeeper.

Patient 'A': "I am always happy to get involved to contribute where possible because they do such a good job here."

**BARRIERS & MONEY** "Finding money for initiatives is always difficult," said Simeon Edwards, Unit Manager. "We now have cost avoidances running at over £32,000 a year as a result of this carbon reduction programme. It would be wonderful if we could re-invest some of that into more carbon reductions, for example to reuse the significant amount of reverse osmosis waste water the unit produces."

### WHAT'S NEXT

#### DOING BETTER TOMORROW, AND BETTER STILL THE DAY AFTER

Work is ongoing with manufacturers to reduce wastage of haemodialysis fluids. Other kit such as dialysis sets (20 tonnes of PVC waste p.a.) may be tackled in future. Great scope was found for eco-design in manufacture. Energy efficiency in heating is problematic. The unit has a summer average of 26C, too hot for staff comfort but chilly for patients undergoing dialysis. No ideal solution as yet, but the team continues to work on it.

A 'switch off' campaign is underway. The team aim to reduce existing lighting by 25% by removing some lighting tubes. The equipment store awaits its light sensor. Also still to come is the opportunity to reuse reverse osmosis waste water in toilets, as has been done at Canterbury, and other treatment improvement options. With renal cases increasing at 6% p.a. another big opportunity is the introduction of a self-care programme for renal patients. Benefits include the chance for patients to contribute to their own care at any level and gain control, less dependence on nursing staff, and the possibility of home treatment. All this will promote patient psychological welfare, but it has clear implications for carbon reduction too.

The RCHT renal unit green project was a pilot project for SAP - Sustainable Action Planning for clinical teams. For information and resources to run SAP in your unit see [sap.greenerhealthcare.org](http://sap.greenerhealthcare.org).

You can see the Cornwall case study on the SAP website at <http://sap.greenerhealthcare.org/royal-cornwall->

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