

Distance treatment — Iceland

Satellite dialysis

— diagnosis and treatment



Summary

Since 2015, patients at Akureyri Hospital who need dialysis have been able to visit the local hospital for treatment instead of travelling to Reykjavik 400 km away. Specially trained nurses conduct blood tests and deliver dialysis treatment, although medical instructions are administered from the National University Hospital of Iceland in Reykjavik. All blood test results are available to the nephrologist in Reykjavik via an interconnected database and regular meetings are held between the nephrologists and nurses via Skype. The patients also participate in meetings when necessary.

Main effects of the solution

- Patients do not need to travel three or more times per week in order to receive treatment.
- Less worry and greater security for the patient.
- More stable treatment.
- Lower cost.
- Less morbidity.

Users

- Patients with chronic renal failure.
- 2–4 patients receive one four-hour treatment three times per week. Occasional guest dialysis are also conducted.
- The age group is 40 to 75 years, but varies.

Quotes/Testimonials

"Having this service here in my hometown has changed everything for me, I would have had to move to Reykjavik if this service had not been available. I used to fly to Reykjavik three times per week at first and it made me very tired. I was not as sick then as I am now, so this changes everything". — Male, 37 years.

Elaboration

Needs and challenges

Before 2015 it was only possible to receive dialysis treatment at the National University Hospital of Iceland in Reykjavik. For patients in the northern region, this meant travelling three or more times each week by plane, which was both expensive and time consuming, as well as stressful for the patients during the winter when weather conditions could disrupt flight schedules.

Solution and function

Two dialysis machines are in use at Akureyri Hospital and they can treat four patients per day. The nurses have received special training at the National University Hospital of Iceland and take care of the patients before, during and after treatment. They connect to the nephrologists via Skype to discuss conditions and further treatment.

The patients also participate in meetings when necessary. A laptop is situated at their treatment station. This makes it possible to see and talk to the specialist, ask questions, etc.

Using Skype is not an ideal solution for these kinds of meetings when health issues are being discussed. Thus, a more secure solution is needed.

Implementation

The healthcare workers (physicians and nurses) set up a training programme and follow up. Inter-connected EHR is a vital component.

Economy

The social healthcare system funds all travel expenses for patients so this solution saves these expenses. Additional costs for family members required to accompany patients are also saved.

The cost of the solution depends on the dialysis machine used. In this case, the machines are the property of the National University Hospital of Iceland. The nurses must receive training in Reykjavik for two weeks before they can start treating patients. Travel expenses, board and lodging, plus a half-month salary are also required.

Process

An agreement between the National University Hospital of Iceland, Akureyri Hospital and Icelandic Health Insurance was signed and medical and logistical responsibilities assigned.

Follow-up/monitoring

Annual visit from nephrologist.

Learnings and tips

Use proven methods. Proper education is vital.

Context

Can be used in other rural hospitals.

Contact details

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Name of the service

Satellite dialysis at Akureyri Hospital

Service provider

Hekla and Heilsugátt are the solutions that interconnect EHR.



Picture of the solution in use at Akureyri hospital