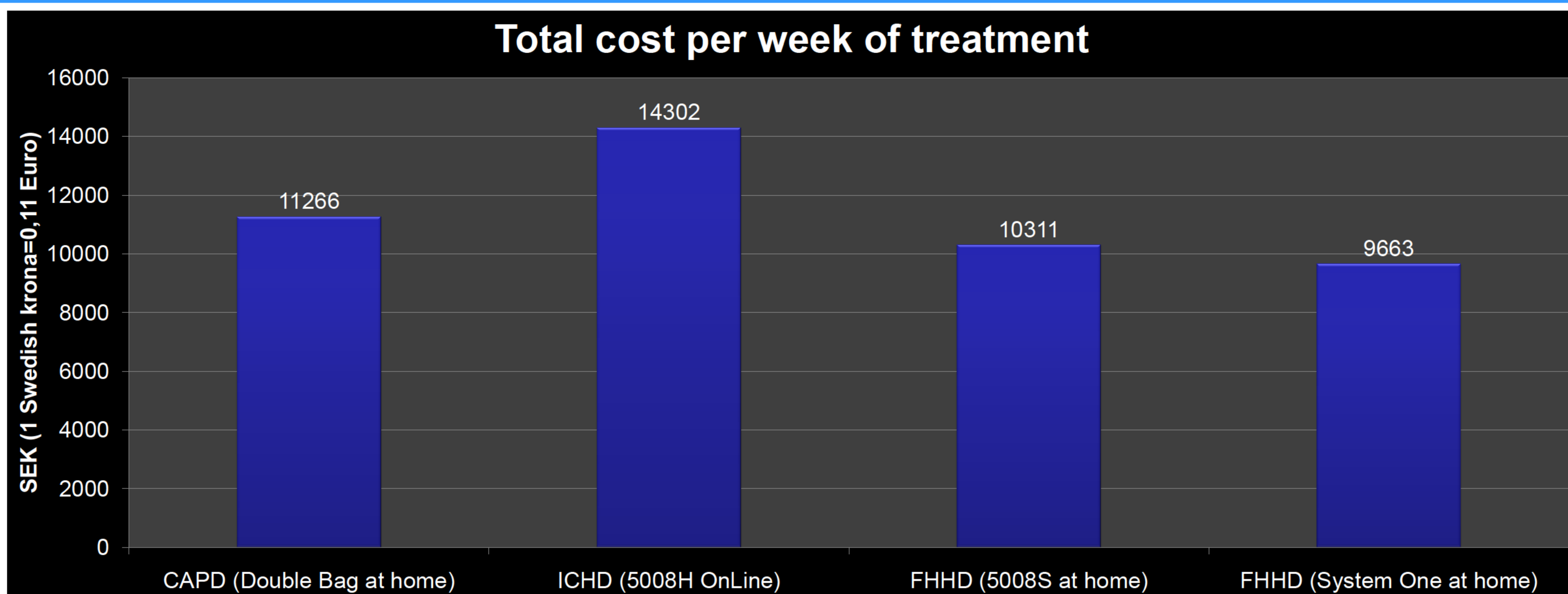


Total Cost analysis in Sweden: Comparison of 4 different dialysis modalities

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Every year the number of prevalent dialysis patients increases by 2,25% in Sweden. In 30 years, the numbers of dialysis patients may double. But the hospital and the community budget will not be able to afford such a value.

NOW IT'S MORE IMPORTANT THAN EVER TO CHOOSE THE RIGHT DIALYSIS MODALITIES!



METHODS

Four different dialysis modalities have been investigated. CAPD (Continuous Ambulatory Peritoneal Dialysis) was based on 4 exchanges per day on Baxter® double bags system including Physioneal™ solution. ICHD (In-Center HemoDialysis) was based on 3 times 4 hours treatments per week on a Fresenius® 5008H™ on-line in the hospital. FHHD (Frequent Home HemoDialysis) was based on 5 treatments per week at home both with a Fresenius 5008S and with an NxStage® System One™.

The cost analysis was made with a PENG model, matching cross-regional micro-costing data collection in Sweden and the Gothenburg University database; more than 20 contacts from medical staff, administration, patient and industry were interviewed; more than 600 cost items were included, from the cost of a needle to the cost of hospital buildings (ancillaries and consumables, hardware, utilities, waste management and disinfection, headcounts among 22 specialties, infrastructure and service costs, product deliveries and personal transportation, training and installation, testing and labs, patient medications...).

RESULTS

FHHD with NxStage System One shows the lowest cost of treatment per week in Sweden, **9 663 SEK (1 043€)**, compared to FFHD with Fresenius 5008S, **10 311 SEK (1 113€)** that is +6,7%, or CAPD with Baxter double bag, **11 266 SEK (1 216€)** that is +16,6%. In-center HD requires the highest level of resources, it is the most expensive modality **14 302 SEK (1 543€)** that is +48,0%.

Treatments at patients' homes have the lowest cost, mainly because less medical staff and infrastructure costs are allocated and transport is limited to doctor's visits. Moreover home treatments can allow treating a growing dialysis population with limited capital investment to build extra hospital capacity. Comparing home modalities, NxStage offers the cheapest treatment. Especially, PD has a high cost of supplies due to frequency of exchanges and Home HD with a traditional machine needs extended education time, nursing resources and costs for home modification.

CONCLUSIONS

The yearly cost difference for the hospital of a patient treated in-center and a patient treated on FHHD with NxStage System One is **241 228 SEK (26 029€)**. Also many Home HD patients in Sweden can re-start work. A patient working half time would generate additional **181 000 SEK (19 530€)** savings per year for the community. In 2014, only 5,9% of 3859 dialysis patients are treated on Home HD in Sweden*. In addition to the published clinical outcomes and quality of life of FHHD, offering this modality to 10% of the dialysis patients could save up to **38,2 Mio SEK** per year for the hospitals and can generate additional savings and incomes from increased working activity.

More than an economical value

Benefits of FHHD cannot be limited to SEK. Hundreds of publications already highlighted clinical benefits and improved quality of life with FHHD.

We may also consider:

- Patients getting more free and quality time to live.
- Ability for patients to travel with their treatment.
- Lower carbon footprint from reduced transportation to/from the hospital and lower utilities needs.
- Etc.

