

Anya Pogharian never thought her high school science fair project would bring her international attention and job opportunities from around the world.

"India, Australia, Russia, Armenia — like everywhere, just everywhere. South America. You name it, I got a message from there," said Pogharian.

Ontario-based health-care firm [Baxter Corp.](#) offered to sponsor her and provide her with filters.

Pogharian said she heard from dialysis patients right across Canada, congratulating her and wishing her success.

She was 17 when she invented a cheap, portable dialysis machine.

CBC News [first published her story in February](#) . Pogharian was inspired by volunteering at a hospital dialysis unit.

Dialysis is the process of cleaning waste from the blood. It's typically used for people who have kidney disease. The treatment takes about four hours a couple of times per week.

CBC's story received tens of thousands of hits, and the international exposure pushed Pogharian to take her invention to the next level.

- [Anya Pogharian invents \\$500 dialysis machine with at-home potential](#)

Pogharian said she's been working non-stop to improve her portable machine, which costs about \$500 to build. Currently, dialysis machines cost about \$30,000.

"To date, I have been working crazy hours on this project...I've stopped counting."

25 minutes

[Héma-Québec](#), the non-profit organization that manages the province's blood products and human tissue and ensures the safety of blood supply, offered her an internship, allowing her to try her prototype on real blood.

Pogharian and her team hoped it would filter four litres of blood in two and half hours. It took only 25 minutes.

She said its efficacy, simplicity and portability make it ideal for the developing world and in disaster zones.

It could also help people closer to home.

Patient Philippe Ouaknine said dialysis treatments, which often took several hours every other day, kept him from working and seeing his family.

"My mother lives outside the city. So we had to time [it to] make sure that I was coming back for my treatment."

Home units do exist but are expensive and rarely available through Quebec's health care system.

Ouaknine said Pogharian's invention would revolutionize patients' lives.

That's exactly what Pogharian is hoping for.

"I just know how difficult it is. And I can't even imagine having to live with that," she said.

Pogharian expects her machine to hit the market in a couple of years.

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