

Mark Gelfer wanted a better way to measure blood pressure

So he invented one



It's a perfect question for Trivial Pursuit. What is the most commonly performed medical test in the world? If you guessed blood pressure monitoring, you'd be right.

Now let's try another question. What is the one medical test that has absolutely no quality control? The answer – as frightening as it seems – is also blood pressure monitoring.

It was those dual facts that led Dr. Mark Gelfer and a group of his friends to start a company, based in Coquitlam, whose purpose was to develop a better blood pressure instrument.

"People are trained, generally, very rudimentarily on how to take measurements. It's extremely operator-dependent but," says Dr. Gelfer, "we use the same numbers to make judgments."

He says that high blood pressure is ranked by the World Health Organization as the leading risk factor for mortality and morbidity. It's the third risk factor, including all

"I've seen a lot of poorly performed blood pressure measurements," says Dr. Gelfer. "That's why I got into this."

sequelae (stroke, heart attack, kidney disease, congestive heart failure and blindness),

for global burden of disease (or the cost to society to care for people with that disorder).
"In the very best hands, blood pressure is controlled in less than 30 per cent of patients to target levels set," he says, adding that the number in Canada is probably about 13 per cent. Statistics Canada will embark on a new survey of heart disease and risk factors in 2006.

Basically, Dr. Gelfer believed that if physicians were measuring apples against apples, they would stand a better



chance of gathering accurate information and making informed decisions.

So he and some friends started VSM

Medtech in 1998. Its blood pressure product, BpTRU, received FDA approval in 2000. The device costs between \$800 and \$1,000, depending on the model. BpTRU 100 is a wall-mounted plug-in model; BpTRU 300 is a rechargeable, portable model with an optional temperature probe.

"I've seen a lot of poorly performed blood pressure measurements," says Dr. Gelfer. "That's why I got into this."

BpTRU is an electronic measuring tool – "a hypertension management tool" – that is automatic, extremely accurate when compared to worldwide standards, and follows the guidelines of taking multiple measurements in a sitting.

Which Dr. Gelfer says is something most doctors don't do.

"Most busy practitioners don't have time and if they do, they influence the outcome," he says. "The patient gets nervous around the doctor. It's called the white coat effect."

There are other electronic monitors available but Dr.

Gelfer says that often they are consumer products. His is a medical-grade instrument.

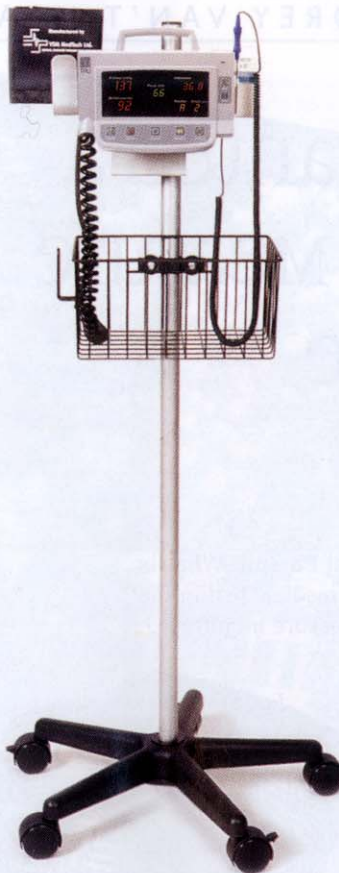
"A lot of electronic instruments are not necessarily accurate; they don't have to prove it," he says. BpTRU, on the other hand, has been validated independently. Clinical corroboration was done at both the University of Toronto and the Mayo Clinic. In the Graves study, says Dr. Gelfer, "the conclusion was that the readings with BpTRU achieved accuracy equivalent with the gold standard."

That level of accuracy is crucial, given that hypertension is epidemic. The dangers associated with hypertension are often made more severe by the inherent difficulties associated with proper diagnosis and treatment.

Recent studies have shown that nearly 80 per cent of all hypertension patients were either misdiagnosed, mistreated or were unaware of their condition.

"A lot of doctors are not aware of accuracy issues," Dr. Gelfer explains. "A lot of doctors are slow to change and haven't heard about [our machine] or don't really care, as their interest is in another aspect of medicine."

And, although currently used mercury or dial-type instruments can be accurate, they



require an incredible amount of operator-technique proficiency. The operator, usually a physician or nurse, must follow the guidelines each and every time they take a measurement. Again, most usually don't.

These problems aren't new. The manual blood pressure measuring technique was first developed in 1896 by the Italian Riva-Rocci. No one's been happy with the results since.

Dr. Gelfer likes to quote Eoin O'Brien, a world expert in blood pressure measurements: The technique has had problems from the outset. Why, we might ask, have we connived for so long in perpetuating inaccurate measurements in both clinical practice and hypertension research?

Good question, but you won't find the answer on the back of a Trivial Pursuit card.

"Eventually, every doctor should have one of these," says Dr. Gelfer, "but every doctor should take a good, hard look at their ability to take accurate blood pressure measurements according to the guideline every time. If you can't do it every time, as a service to the patient they should switch to a method that does, such as this."

Real Estate at Whistler



Elizabeth Chaplin
Resort Property Specialist

Direct: 604-905-2823
Toll free: 1-800-667-2993
E-mail: lizard@wrec.com



THE WHISTLER REAL ESTATE
COMPANY LIMITED

KNOWLEDGE ~ SKILL ~ ABILITY

Put Elizabeth and her team to work for you.

Licensed associates: Lindsay Graham and Cole Shuker

Administrative Associate: Michaela McPhie

www.realestateatwhistler.com