

A partnership with robots to fight obesity

With technology bent to a surgeon's will, an operation becomes more precise.

Digital technology has permeated 21st-century life to the point where it is coping some blame for the obesity epidemic sweeping the western world. Lifestyles are more sedentary if people are glued to a screen for work and leisure.

However, technology can also be used to help combat obesity. In surgical practice, robotics has been described as being akin to the move from open to laparoscopic surgery. Mr Kiron Bhatia says he loved dissecting frogs in his high school biology class, then developed an interest in video games. Now a bariatric surgeon, he says digital technologies and robotics are the future, as they assist surgeons to undertake procedures.

"The key advantages lie in better dissection, better vision and better dexterity that the robot allows, to the extent that we can perform minute movements precisely, suturing and stitching is much easier and, ultimately, leading to better outcomes for patients with fewer complications," he says.

"So it is safer, less invasive and, I believe, leads to quicker recovery times."

Mr Bhatia opened the Heidelberg Weight Loss Surgery about five years ago after seven years as a consultant at the Austin Hospital specialising in bariatric surgery. He has been using robotics during surgery since late 2013.

He says the 'Da Vinci' robot he uses is particularly helpful during gastric bypass

sleep apnoea or metabolic syndrome," Mr Bhatia says. "The robot allows us to safely deliver the surgery to a lot more patients who want to choose that option because it is particularly effective for patients with multiple weight-related medical problems."

A gastric bypass procedure sees the stomach divided to create a small gastric pouch or smaller stomach with a new opening. The smaller stomach is then joined to the middle part of the small intestine. This allows food to "bypass" the lower stomach-upper small intestine, which in turn aims to reduce the amount of food a patient requires in order to feel 'full'.

Mr Bhatia says society has come to consider it normal to be overweight or even obese.

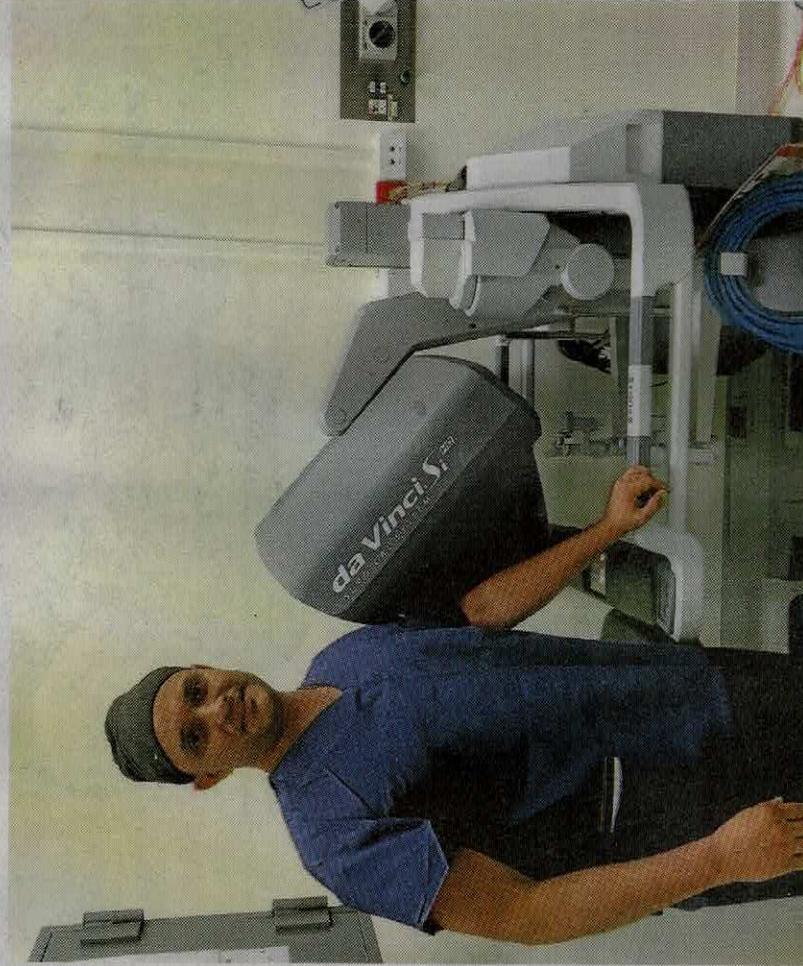
As much as 60 per cent of the population is considered to be overweight, and understanding of what an average weight is has changed.

While he believes these perceptions need to change for health reasons, for many people, controlling their weight may not be achieved by making lifestyle and diet changes alone.

"Once, gastric bypass was considered a big, scary operation," Mr Bhatia says. With use of robotics, it is a more commonplace surgery.

All surgery has risks, which need to be fully understood. Gastric bypass surgery takes three- to four hours and is followed by an average three-night hospital stay and a week's rest.

The Heidelberg Weight Loss Surgery program includes ongoing support for patients from in-house dietitians, a psychologist and nurse manager.



Mr Kiron Bhatia says robotics offer surgeons better dissection, better vision and better dexterity.

not produced the outcomes the patient sought. "When all else fails, we go to gastric bypass. Before the Da Vinci robot was on the scene, we were only going to the gastric bypass procedure for conditions such as obesity with type 2 diabetes or with multiple other medical problems in relation to weight such as high cholesterol, blood pressure,

surgery, which is considered the "gold standard" in weight-loss procedures because it, and its variations, may produce the most procedure-related weight loss.

But, he says, while it is also the most complex option, it remains the go-to procedure for revision if a patient has previously had a form of weight-loss surgery that has