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### Unlucky numbers

Is there anything more pointless, more mind-numbingly tedious, than doing a Sudoku? Ages spent fiddling and arranging numbers until they appear in a neat perfectly symmetrical grid meaning ... nothing. Numbers can be full of meaning and wonder. Numbers underpin harmony and the beauty of music. Pythagoras thought they corresponded to the natural harmony of the universe. Digital cameras use millions of numbers to create an image but by using one I can produce more pleasing pictures than I ever could with film.

Numbers often give fascinating insights to the many curious and unpredictable aspects of our world. There are many paradoxes and unsolved puzzles that have intrigued mathematicians over the years. The four colour theorem claims that every map drawn on paper can be filled in with just four colours so that no two neighbouring regions are the same colour. Another recent quirky mathematical discovery was that shuffling cards six times makes little difference to the order of the cards yet with a seventh shuffle the deck becomes completely random and extra shuffles don't change that. One crucial shuffle and the world of the cards transforms from order into chaos.

We see numbers as consistent and predictable, a comforting way of ordering the increasingly complex world around us, but often they behave unexpectedly and paradoxically. We can paint the world with four colours but it takes 8.6 million pixels to take one picture of my family.

We define our patients more and more by numbers. We measure their physiques, their physiology even their personalities. And now, for added quality we measure their pleasure in life with phq9s and HADs. For a long time Americans have been exhorted to 'know their number,' i.e. their blood cholesterol, as if this contained all the secrets to unlocking their future good health, like some medical star sign.

This is supposed to empower patients but more often it does the reverse. We pick a number, some arbitrary statistical cut off point, apply it to a person — who

often feels perfectly well — and hey presto they transform into a patient. From there it's a short trip to becoming part of a population to a statistic to a damned lie. Rather than curbing the influence of medicine it increases the medicalisation of ordinary life and adds to the power of doctors.

The tables are being turned on doctors and measuring is seen as an antidote to declining trust. After a false start last year it looks like quality ratings are on their way to GP practices. Dr Foster will be round to measure us up to make sure we fit our new shiny suits as corporate, customer-focused salesman of the public health agenda. How do we know that the values we measure will match the values we want to promote? How do we know that we have the right indicators or enough of them?

Will we need more and more bits of information like a digital camera? Perhaps, like colouring a map, a handful of elegant measures will give a complete picture or perhaps, like a mirror image of shuffling the cards, there are a fixed number of indicators which will suddenly turn chaos and complexity into order and harmony.

We all want to improve the quality of our care to increase and establish trust, but just doing anything can be worse than the original problem. The history of reducing people's worth to a set of numbers is littered with dangers. In the past we have put great faith in IQ values yet we know that it is a very blinkered measure that suffocates other human values such as emotional intelligence and creativity. Education focused on limited targets produces one dimensional exam-passing pupils rather than drawing out individual worth. What we decide to count will determine what we decide to value. We reap the numbers that we sow.

As doctors we should stick to being sure that treatment will not be worse than the disease. It is better to light a match than curse the darkness — but not in a fireworks factory.