VIEWS AND REVIEWS

NO HOLDS BARRED

Margaret McCartney: Why do we ignore uncertainty?

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The electronic medical age is ours. It's been accompanied by an attempt to ignore uncertainty, creating a fallout that we seem intent on ignoring. But human beings are full of nuance, and medicine is crammed with degrees of possibility, with a lack of working retrospectoscopes. So why don't our systems reflect this?

General practice notes are now almost all on computer, and it's easy to be confused by them. We have separate files for notes made by GPs, those made by hospital staff, other correspondence, and separate notes entirely for district nurses, health visitors, and social workers. There is no united system.

Furthermore, a set of paper notes usually exists for anyone over a certain age. These are usually crunched into diagnostic codes by GPs: significant illnesses, conditions, or investigations are flagged into a summary, which is then permanently visible on the electronic record.

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Some practices seem to code everything from a cold to transient infectious diarrhoea. Other GPs, including me, try to ensure that the list of codes contains only conditions likely to be directly relevant to future care. This is primarily for usability. If a list is too crowded important things can't be rapidly assimilated. It's useful to have a quick reminder of the patient's medical history.

But the coding used in general practice computer systems is binary—on or off, yes or no. This insistence that all answers are easy and complete, fitting within a bracket, has permeated through the NHS. Referral systems and prognostic risk management are all about the tick box. This has no nuance, no space for "almost," "just about," or "often"; for "possible asthma" or "probable TIA."

People are trained to respond to the clean lines of the perfectly filled form, but the uncertainty inherent in medicine has not disappeared—it's just ignored. When we forget uncertainty we forget that the basis for suggesting that only chest pain of a certain short duration needs a fast exercise test, for example, is based on a probability. Thomas Bayes must surely look down at the panoply of medical protocols with despair.

The inquest has been held into the death of Richard Handley, a man with Down's syndrome, who effectively died from constipation.¹ From the publicly available information it was "highly suggestive" that he had Hirschsprung disease.² For various good reasons he never had a biopsy to prove this condition and, as a result, never had it formally diagnosed. This information may have been hugely helpful in achieving better care before he died, but it was no longer visible. Reference was made to it on the old paper record, but not on the visible electronic one.

Our systems don't reflect the uncertainty, nuance, and probability of healthcare. But, when our work involves little else, why do we ignore it?

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- 1 Inquest. Inquest into the premature death of Richard Handley, who had learning disabilities and died of constipation, identifies gross failures in care. 8 Feb 2018. <https://www.inquest.org.uk/richard-handley-conclusion>.
- 2 Flynn M, Eley R. Serious case review: James [fictitious name]. Suffolk Safeguarding Adults Board. Oct 2015. www.suffolkas.org/assets/Safeguarding-Adult-Reviews/SCR-Case-James-091015.pdf.

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