

# Paint-by-numbers medicine (part one)

Remember when we were kids and they had those “paint-by-numbers” kits for sale at the Five & Dime store? OK, perhaps that dates me! The pitch was “You, too, can be a Great Master! Just follow the easy color-coded directions.” I bought Leonardo DaVinci’s Mona Lisa, and dutifully applied paint in the intricate pattern according to the numbers on the canvas.

And voila! The result was not exactly a masterpiece. The great lady appeared gimlet-eyed, her smile a lurid pink slash, her skin a weird flesh-tone, and the subdued colors of the background were rendered a little too psychedelic. It was as if Paul Klee had painted the mysterious lady’s portrait while simultaneously suffering from cataracts and Parkinson’s Disease!



Unfortunately, that’s a little like how the practice of medicine has become these days. We entered medical school as brilliant, idealistic science wonks. Our training was supposed to equip us with tools to independently analyze health problems. We were to apply our knowledge of biology and physiology to the myriad of conditions our patients would present to us.

But, somewhere, the notion that we were to be creative interpreters of science—authors of masterpieces of diagnosis and treatment—got lost along the way. The “art” of medicine gave way to assembly-line medicine.

Pressured with time constraints and increasing mandates to standardize our care, the artistry yielded to ready-made algorithms. If this, then that. Find a bug, use this drug. This lab value is too high, lower it. This is too low, raise it. Is the drug on formulary? No, then use a cheaper drug. Not better? Well, at least we followed the script. Next patient!

Here’s an example of paint-by-numbers medicine at work. A print-out of one of my patients’ cholesterol came back with these guidelines:

CHOLESTEROL

OPTIMAL < 200 MG/DL

BORDERLINE HIGH 200-239 MG/DL

HIGH 240 MG/DL OR GREATER

(This is according to the ATP Guidelines established by the National Cholesterol

Education Program)

My patient's cholesterol is 231, but her HDL is 75. Does she need a statin? The guidelines would call for it.

The absurdity of these blanket recommendations is beautifully spoofed in [this cartoon video](#). A reasonable patient argues with his robotic doctor over slight elevations in his cholesterol. The doctor insists "You must take Lipitor or you will die . . . if you don't take Lipitor, call 911 immediately and have the ambulance take you to the cemetery."

Medical authorities recently tried to refine recommendations based on mere total cholesterol with the addition of a **computerized risk factor assessment** that takes into account race, age, sex, smoking history and other factors in addition to lipid levels.

When I take that test, according to guidelines, *I actually exceed the artificially low threshold set for the recommendation that I start taking a statin!* Imagine me on Lipitor! Nowhere does the questionnaire elicit from me that I'm optimal weight, that I exercise intensively 5-6 days per week, or that I follow a heart-healthy diet (much less that I take cardio-protective supplements, which they don't believe in). Despite the fact that I'm perfectly healthy and my HDL is 70, the calculator just can't get over the data point that my cholesterol is over 200, which means that the new sophisticated algorithm offers little improvement over the old crude guideline that cholesterol must invariably be less than 200 or else we need to lower it.

Recently, a study was done to see if the risk factor calculator is on target with its predictions. If accurate, you could follow a group of patients that had, say, a 9% ten year predicted risk of heart disease, and at the end of ten years, exactly 9% will have developed a heart problem.

Well, here's what the study found: The number of predicted cardiac events *far exceeded* the actual events. The risk calculator guidelines over-estimated true risk by a whopping 78% – 86% in men and 67% in women!

If you want to see paint-by-numbers medicine in action, check out [this Byzantine flow chart](#). It gives doctors detailed instructions on whether or not to start statin drugs, eliminating all the guesswork. But once you uncross your eyes you'll realize that the default alternative is "if in doubt, start a statin," even if the patient is mostly free of risk factors and their cholesterol is just a little high. And for diabetics, hypertensives, or people with established heart disease, the choice is eliminated altogether—the guidelines say statins are a must.

It's as if the deck were stacked by the risk calculator developers in favor of statin-prescribing. And no wonder. The august scientific bodies who issue these pronouncements are rife with conflicts of interest. Many of the doctors entrusted with these decisions receive research grants from the very pharmaceutical industry their recommendations enrich—sometimes totaling annual stipends in the hundreds of thousands of dollars!

Think things are likely to get better when medical “reforms” are enacted? Both houses of Congress just this week reached a compromise to avert cutting Medicare payments to doctors by 21%, which would have resulted in thousands of physicians dropping out of the program. The bill merely reinforces the trend toward paint-by-numbers medicine. According to the American Association of Physicians and Surgeons:

“The 263-page bill creates many items that will have to be paid for—risk adjustment calculations, quality and outcomes metrics, case management, resource use monitoring, interoperable electronic health records, data registries, practice assessment checklists, and so on. Many stakeholders will be paid for ‘helping’ the Secretary develop and physicians comply with the ‘value’ and ‘performance’ determinations... This will result in an onerous, very costly Sustained Global Rationing program, which will divert resources from medical care yet still not make the Medicare program solvent... *Patients need to find a physician they can trust, who is working for them, not the government and its private contractors* [my italics].”  
(Source)

In part 2 of this article, I'll share with you how paint-by-numbers medicine is affecting our management of diabetes, osteoporosis, hypertension and other conditions.