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LETTER TO THE EDITOR

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Differences between acute and chronic disease: comment on the article by Holman

To the Editor:

Noting that medical clinical, fiscal, administrative, and education policies have not adjusted to a world in which the burden of chronic illness outweighs that of acute illness, Holman outlines differences between acute and chronic illnesses that should inform medical care policies 1. I suggest one more difference: diagnostic uncertainty, which is much more common among chronic illnesses.

Although acute illness diagnoses are usually binary (yes or no), chronic illness diagnoses often have an ambiguous place within a spectrum. Nearly half of patients with autoimmune rheumatic disease have uncertain diagnoses because their clinical or laboratory abnormalities do not reach criteria thresholds, they have overlapping diagnoses, or their diagnoses are otherwise atypical 2. Ambiguity is common among patients with other chronic illnesses of unknown cause such as the following: inflammatory bowel disease, chronic lung disease, and demyelinating disease.

The nosology of *International Classification of Diseases, 10th Revision* offers 14 400 (soon to be 55 000) separate diagnosis codes, based mostly on acute illness 3. As Holman notes, our educational, research, administrative, and reimbursement rules assume that binary certainty is the standard, but this level of specificity is unsuitable for many patients with chronic illness.

Medical science is inexact; science changes and patients change. Today's statistical tools make it possible to recognize, quantitate, and include measures of uncertainty in all clinical, scientific, administrative, and educational aspects of medical care for acute and chronic illness. To acknowledge uncertainty is an opportunity, not a failing. Allowing it a place in our models will improve our understanding of symptoms, mechanisms, treatments, and policies. When we act on data in hand rather than on data altered by deceptively rigid diagnosis labels, we will improve all aspects of medical care.

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1. Holman HR. The relation of the chronic disease epidemic to the health care crisis. ACR Open Rheumatol 2020;2:167–73.
2. Lockshin MD, Barbhaiya M, Izmirly P, Buyon JP, Crow MK. SLE: reconciling heterogeneity. Lupus Sci Med 2019;6:e000280.
3. Lie AK, Greene JA. From Ariadne's thread to the labyrinth itself: nosology and the infrastructure of modern medicine. N Engl J Med 2020;382:1273–7.