taking these combined values into consideration can be helpful, as Dr Phillips shows, in interpreting successive laboratory results in patients on treatment.

John Masarei
Chemical Pathologist
Mount Pleasant, WA

References

1. Fraser CG. Biological variation: from principles to practice. Washington (DC): AACC Press; 2001.
2. Desirable specifications for total error, imprecision, and bias, derived from intra- and inter-individual biologic variation. 2009. www.westgard.com/biodatabase1.htm [cited 2009 Sep 4]

Dr Pat Phillips, author of the article, comments:

I appreciate Dr Maserei identifying the 'index of individuality' as an objective way to tell when a test result may be within the relevant reference range (based on a group of people) but outside the individual's healthy range (which may be much narrower). This distinction can be clinically important. For example, a free T4 may be within the laboratory range (that is, normal) but be biologically high for the individual and associated with a suppressed or increased thyroid stimulating hormone. This is the pathophysiology of the real clinical syndromes 'subclinical' hyper- and hypothyroidism.

Unfortunately, the only measure of result variability given by most laboratories is the laboratory reference range, which includes many components of variability as well as that occurring within one individual. In these situations, one has little choice and must interpret the individual result in the context of the general laboratory range.

However, when interpreting sequential results in one individual, one does not consider the laboratory reference range but the total variability within that individual (CV_i). I suggested that the least significant change should be considered a true signal of biological change over and above the background 'noise' of variability and is approximately $2CV_i$.

The major point was that when interpreting laboratory results, one is trying to identify a clinical signal against the background variability. For single results the only information about the background variability is the laboratory reference range, but for sequential results the appropriate measure of variability is the variability within the individual and the least significant change.

Subsidised medicines for Aboriginal and Torres Strait Islander people

Since August 2006, the Pharmaceutical Benefits Scheme (PBS) has been including new listings specifically for the treatment of common conditions in Aboriginal and Torres Strait Islander people. Some listings are medicines new to the PBS, while others vary the restrictions for prescribing existing PBS items. For the most up-to-date information on relevant PBS-subsidised items, and their conditions for prescribing, see the current list in the fact sheet at www.pbs.gov.au.

A new listing is nicotine replacement therapy for nicotine dependence.

The items in the box are available as 'Authority PBS prescriptions'. For more information about PBS access by Aboriginal and Torres Strait Islander people, send an email to pbs-indigenous@health.gov.au

For changes to this list and other listings, readers can subscribe to news alerts from the PBS at www.pbs.gov.au/html/healthpro/subscription/manage

Authority PBS listings as at 1 August 2009

Treatment of a fungal or a yeast infection

1. Bifonazole cream (1%)
2. Clotrimazole lotion (1%)
3. Ketoconazole cream (2%) and shampoo (1%, 2%)
4. Miconazole nitrate (2%) as cream, powder, lotion and tincture
5. Nystatin cream (100 000 units per g)
6. Terbinafine cream (1%)

Prophylaxis of thiamine deficiency

7. Thiamine tablet (100 mg)

Treatment of whipworm infestation

8. Albendazole tablet (200 mg)

Treatment of chronic suppurative otitis media

9. Ciprofloxacin ear drops (0.3%)

Treatment of a dermatophyte infection where topical treatment has failed

10. Terbinafine tablet (250 mg)

Nicotine replacement therapy

11. Nicotine transdermal patch (releasing approximately 15 mg over 16 hours)