Is it important to insist that all surgical site markers be single-patient-use only?

Yes! Used markers have been shown to grow MRSA from the marker tip (1). Fortunately, this is probably not as problematic as it may sound. Since the marked site will be scrubbed and prepped prior to surgery, any transmitted organisms should be neutralized before a skin incision is made. An increased rate of surgical site infection should therefore not be realized, as supported by the findings of Cronen, et.al. (2). (Unfortunately, this limited study is often quoted as a justification for reusing skin markers, which it is not.)

The more worrisome issue is the fact that the barrel of a used marker can act as a vector for disseminating pathogens throughout the surgical environment as a whole. Contaminated barrels can harbor a wide spectrum of organisms that can survive on the barrel for up to 4 weeks at a time (3). These pathogens can be transmitted onto the hands of whoever reuses the marker next (even though they have appropriately washed their hands in between patient contacts), and then on to the next patient or other medical personnel. Again, this should not result in an increase in surgical site infection rates. Rather, it may result in an increase in the percentage of pathogenic infections (such as MRSA) being seen.

Most institutions now have written policies against reusing skin markers on multiple patients. Unfortunately, the reuse of skin markers has been such a prevalent practice in the past that a surprising number of medical personnel (and institutions) simply do not take the issue seriously enough to take active measures against it. Our products (the "cube" dispenser; individual proof-of-use packaging) are specifically designed to encourage single-patient-use only.

References: