

## Drug, Device, Diagnostic or Procedure?

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Medical technologies are evolving at a very rapid pace. Portable communications devices and other handheld electronics are influencing our expectations of future medical tools. The advanced medical technologies of our future will not necessarily be large expensive systems. They are just as likely to be small and disposable. In addition, the lines between drugs, devices, diagnostics, and procedures are being blurred. This talk will review how microsystems and microdevices are already impacting health care as commercial products or in clinical development. Example systems include point of care diagnostics (POCT), patient monitoring tools, systemic drug delivery, local drug delivery, and surgical tools are described. These technologies are moving care from hospitals to outpatient settings, the physician's office, community health centers, nursing homes, and the patient's home.

Adoption of new technologies depends greatly on compatibility with existing clinical practice. Microsystems that are rapidly adopted fulfill significant medical needs and fit seamlessly with existing procedures. My group has been focusing on studying individual medical procedures and trying to make them do things never before thought possible or dramatically reduce morbidity associated with that procedure.