The triad of anesthesia is composed of hypnosis, analgesia and relaxation. Balanced anesthesia utilizes smaller doses of two or more agents to effect this triad. These anesthetic agents come in the form of vapors and parenteral solutions, which are delivered by very specialized and precise equipment. A clinician interprets multiple physiologic measurements to guide the delivery of such agents, but pharmacokinetic variation can lead to inconsistent outcomes. Automated delivery of these agents can be guided by algorithmic processing of pharmacodynamic feedback to achieve consistently balanced anesthesia.