2.1 Measuring Population Health Outcomes

In practice, the distinction between measurement of individual and population health is important. Individual considerations related to diseases and personal health profiles are useful at the level of patient care (Kindig 1998) where persons are accessing the healthcare system and assessing their own health. From a population perspective, the health of large populations is harder to measure. The healthcare industry is extremely large, and healthcare is responsible for nearly 14 percent of our nation’s gross domestic product. However, true measures of population health and health outcomes are unclear (Kindig 1998; Fryback 1993). Furthermore, misalignment of financial incentives in the present healthcare system can make it hard to maximize population health (Kindig 1998) on many dimensions.

While individual or personal health is defined and measured by terms such as clinical health, functional status, and mental health, defining population health outcomes is more complex. Kindig has proposed use of an aggregate measure of population health that includes considerations of both health and costs (Kindig 1998; Kindig 1997). Using the generic concept of health-adjusted life expectancy (HALE) involves estimating the number of years of life that might be expected given a particular health state. In the calculation of HALE, both length and quality of life are combined in the measure. Kindig (1998) explains that population health outcome is thus “defined as the health-adjusted life expectancy (quantity and quality) of a group of individuals, in an economic framework that balances the relative marginal return from the multiple determinants of health.”

Different approaches to measuring health-adjusted life expectancy include the metrics of quality-adjusted life years (QALYs), disability-adjusted life years (DALYs), years of healthy life, and others (Kindig 1998; McAlearney et al. 1999). To measure health in the context of large populations such as communities or health plans, using health-adjusted life expectancy as an outcome measure can help emphasize the importance of including both medical and non-medical services in programs to improve and manage population health.

The population health management strategies in the book are presented as approaches to improving health and care management for defined populations. Outcome measurement of health and wellness is vitally important to the processes of population health management, and measurement of these outcomes is focused more on personal health indicators than population health indicators. The opportunity to measure population health outcomes in the context of HALE is significant, however, and for organizations and delivery systems with the capability to address these aggregate measurement issues, the challenge remains. However, for the conceptual framework presented in the book, measurement and evaluation of health and population health management processes is addressed at the level of individual patients and consumers, based on the perspective of the program.


2.2 Health Reform in Virginia Benefits from Population Health Management

Health reform efforts that promote expanding access to the uninsured may also benefit from the application of population health management strategies. As one example, the state of Virginia has made strides to help address the problem of access to care by allowing taxpayers to donate all or part of their income tax refunds to a fund that has been established to pay medical bills for uninsured persons who have catastrophic illnesses (Baker 1999). Using a catastrophic care management program to help manage the costs and improve the quality of care for these uninsured persons may help extend the resources available in this fund to cover more individuals. Extending such initiatives to the private sector may be problematic, but the potential exists to improve health and access to care across all populations.