

THE BURDEN OF CHRONIC DISEASE IN PENNSYLVANIA

CONCERNS: Nearly 7.8 million Pennsylvanians, more than 60 percent of the state's population, suffer from chronic diseases such as heart disease and diabetes ranking the state 45th in the nation for chronic diseases.

- The economic impact of chronic disease on the Commonwealth due to productivity loss and treatments, accounts for \$50.3 billion in economic loss in 2003. The cost of treatment, not including the secondary health issues that occur with those diseases, totaled \$13.6 billion in 2003 and is expected to hit \$140 billion by 2023 (Milken 2007).
- This explosion of chronic diseases and the soaring costs associated with their treatment is why policymakers working to reform our ailing health care system always cite chronic care management as the first step toward improving patient outcomes and controlling costs.
- Care management of this population can save significant expenditures in Medicare and Medicaid and greatly add to the quality of life these citizens enjoy in their final years.

SOLUTIONS:

- Chronic care management is an organic component of home health. *The home health model directly establishes a multidisciplinary team of RNs, CRNPs, LPNs, therapists and social workers to provide coordinated medical and non-medical care and support to the chronically ill, in a high-touch, face-to-face, one-on-one home setting.*
- The home health team is uniquely positioned and trained within the existing infrastructure to assess conditions, implement physician's orders, engage patients in their home environment, provide self-management support, educate both patients and family caregivers, and offer 24-hour access supplemented with the use of telehealth.
- **Home Health + Technology = Improved Outcomes:** Home health providers have also been pioneers in the use of telehealth particularly in the area of enhancing the agency's management of chronic conditions.
 - In Pennsylvania, more than 9,000 telehealth units are in use in people's homes to assist home health agencies in promoting self management and complementing the high touch of home health professionals in managing patients' chronic conditions. Having the ability to remotely monitor vital signs including pulse/ox, weight and blood pressure enables nurses to monitor patients' conditions more frequently and promotes early identification of exacerbations that will prevent hospitalizations.
 - Data can be used to determine whether patients are adhering to their management plans and can serve as a basis for demonstrating cause and effective relationships. Telehealth data can also be used to reinforce self-management skills and facilitate physician access to patient data to improve decision making and coordination of care. Other technologies, such as medications compliance units and activity sensors are other tools used by the home health team to keep people safe and at home.

Home-Based Chronic Care Model

CHRONIC CARE MANAGEMENT

(Chronic Care Manager + Physician + Patient/Enrollee)

Technology

Telehealth, EMR, Registry,
Dashboards, Data Exchange
Among Providers

Specialist Oversight

Ensure Evidence-Based
Guidelines, Communicate with
Specialty Physicians,
Coach/Guide Staff



Theory-Based Self Management Support

Health Coaching, Self-Efficacy
Improvement, Principles of
Adult Education

High Touch Delivery System

Assessment, Fact-to-Face
Visits, Proactive Planned
Visits, Telehealth
Nurse/Phone Visits