Key Concepts

- **Definitions**
  - WHO defines SDOH as “…conditions in which people are born, grow, live, work, and age…”
  - CDC defines *Determinants of Health* as “…factors that contribute to a person’s current state of health…”; Social Determinants of Health are “…the complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities…such”

- **Social…Determinants…Health**
  - Social: Social environment, physical environment, health services, structural and societal factors…
  - Determinants: Contributors to? responsible for?
  - Health: Comprehensive, holistic view vs disease, episodic, conditions

- **Dimensions**
  - WHO: Income, Education, Employment, Early childhood development, Food, Housing, Transportation, Social Safety Network, Health Services, Addiction, Gender, Race, Disability
  - Other: Housing; Utility and Technology; Nutrition; Benefits; Legal and Criminal Justice, Human Development, Social and Community Connections, Personal Hygiene, Activities of Daily Living, Safety and Disaster
Determinants of Health

...health care services is only a small component
Sources of SDOH

- **Health Plan**
  - Enrollment information: capturing some of the social determinants from members
  - Expanding through access to external, context-specific data sources (public health, census, other)

- **Provider**
  - Data collected during clinical care and health services and maintained in EHR
  - Expanded through research from primary and secondary data collection

- **Other**
  - Individual vs Population data
  - Public health data
  - Community resources (social service networks, safety net providers)
  - Consumer data
  - Specialty data – Housing, Education, Transportation, Employment, Utility, Legal, Safety and Disaster, other
Uses of SDOH

- **Individual Care**
  - Personalized health (precision medicine)
  - Support delivery of services at point of care
  - Partnering and connecting with social service resources

- **Population Health Management**
  - Identification of populations at risk
  - Predictive analytics to support population health interventions
  - “Precision Population Health”

- **Community Development**
  - Social Service Resource Locator
  - Identification of gaps in SDOH at the community level
  - Implementation of strategies to fulfill gaps
REAL TIME REPORTING

KPHC Dashboard: 24/7 Metric Reporting
Tools for Using SDOH Data

- Screening Instruments
  - National Association of Community Health Centers’ Protocol for Responding to and Assessing Patients’ Risks, and Experiences – PREPARE Tool
  - American Academy of Family Physicians EveryONE Project Screening Tools (long- and short-term form)
  - CMS Accountable Health Communities’ Health-Related Social Needs Screening Tool

- Population Health Analytics
  - NQF Social Determinants of Health Data Integration Initiative – to integrate SDOH into clinical practice
  - Risk assessment tools integrated to EHRs and Health Plan Data Systems
  - Advanced predictive analytics tools to identify populations and individuals that may suffer from specific deterioration of health situations

- Toolkits
  - Association of Academic Health Centers developed a Toolkit to Promote Multi-Sectorial Collaboration to address SDOH
Standards for SDOH

- Major challenges exist regarding the definition of standards for the collection, use and exchange of SDOH data
- Lack of basic consistent definitions across the industry on SDOH domains, and metrics related to those domains
- Need for identifying and establishing harmonized SDOH value sets, terminologies, vocabularies and code sets
- Need to incorporate standardized SDOH data elements into EHR systems, health plan data systems, public health databases
- Important standards development efforts underway
  - Institute of Medicine recommended inclusion of 12 SDOH in all EHRs
  - ONC Interoperability Standards Advisory identifies initial set of SDOH data elements, including financial resources, education, stress, depression, physical activity, alcohol use, social connection and isolation, exposure to violence
  - SIREN – Social Intervention Research and Evaluation Network: developing a series of harmonized value sets on SDOH
  - NCVHS – Measurement Framework for Community Health and Well Being
  - CDC Social Determinants of Health Initiative
  - HL7 FHIR-based bi-directional services e-referral for EHR – Social Service communication