CURRENT U.S. HEALTHCARE PROBLEMS

In the U.S. healthcare environment, challenges include interoperability, increasing insurance premium prices, and a shortage of health practitioners. Interoperability remains the primary barrier as the inability of different health information systems to speak the same language hampers the coordination of care; such inefficiencies can also put a patient at risk, according to Samal et al. (2016) and Weber-Jahnke et al. (2012). In addition, gaps in insurance now affect a wider segment of the population, and many working families face barriers to receiving essential healthcare services; hence it will further deteriorate the problem of economic burden and health disparities, as cited by Collins et al. (2006). Also, the health workforce would come under stress due to the number of professionals falling short because of the aging population and the high increase in chronic diseases, thus some innovations in delivery models such as Patient-Centered Medical Homes and Accountable Care Organizations have to be implemented to optimize care delivery and outcomes, as pointed by Shortell et al. (2009). Dealing with these interrelated issues is the key to improving the efficiency and equity of the healthcare system in the U.S.A.

3 MAJOR HEALTH
PROBLEMS

INTEROPERABILITY CHALLENGES

Diverse electronic health information systems hinder seamless data exchange, resulting in medical errors and inefficiencies(Iroju et al., 2013).

A lack of standardized healthcare terminology complicates data integration and sharing across platforms(Iroju et al., 2013)

IMPACT: Inefficiencies, duplication of efforts, and increased costs are results of fragmented data (Iroju et al., 2013) (Weber-Jahnke et al., 2012).

Solution: namely, the use of standardized healthcare terminology and data exchange protocols

INSURANCE CHALLENGES

TODAY, HIGHER HEALTHCARE INSURANCE COSTS ARE DRIVEN BY GREAT DEMAND PAIRED WITH A LOWER-THAN-OPTIONAL CHOICE OF COVERAGE THAT AFFECTS INDIVIDUALS AND IN TURN HEALTH SYSTEMS(LEE ET AL., 2016).

ACCESS LIMITED: THE DRAMATIC INCREASE IN INSURANCE COSTS HENCE LIMIT ACCESS TO THE NEEDED HEALTHCARE SERVICES THAT WOULD HAVE OTHERWISE ACTED POSITIVELY TO MINIMIZE HEALTH DISPARITIES AMONG POPULATIONS(EGGLESTON ET AL., 2014).
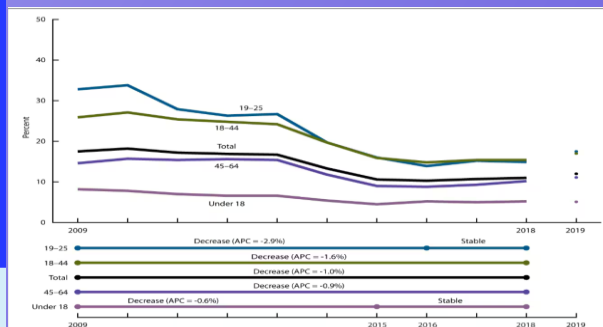
IMPACT: DELAYED OR MISSED CARE FOR UNINSURED OR UNDERINSURED INDIVIDUALS CONTRIBUTES TO UNHEALTHY HEALTH OUTCOMES AND INCREASING DISPARITIES (EGGLESTON ET AL., 2014) (FELDMAN ET AL., 2018).

SOLUTION REDUCE PREMIUM, EXPAND COVERAGE, AND EASE ADMINISTRATIVE BURDEN (EGGLESTON ET AL., 2014; FELDMAN ET AL., 2018).

Diverse EHR systems
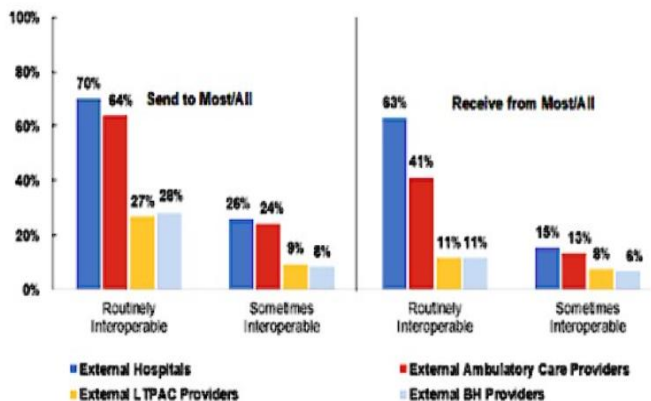
Absence of health insurance
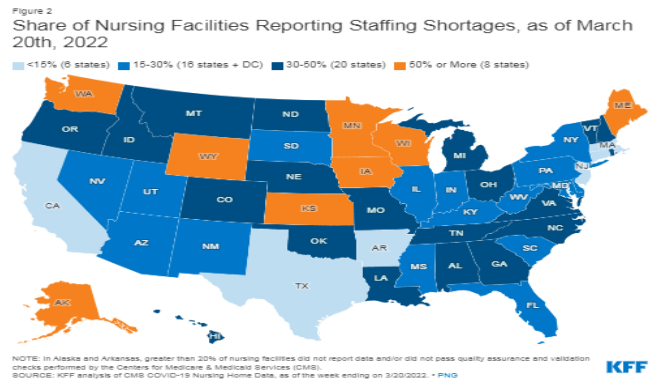
HEALTHCARE PROFESSIONAL SHORTAGE AGING POPULATION:

Increased elderly population stresses healthcare services as their demand more than the supply of healthcare professionals(Lee et al., 2016)(Ismail et al., 2018).

Geographical Maldistribution: A geographical maldistribution of healthcare professionals acts as a body block in accessing healthcare, especially in rural areas(Eggleston et al., 2014).

Impact: The shortages faced by the health sector are continuing to worsen, with staff becoming overloaded by work, patients

experiencing longer wait times, and the quality of care deteriorating ever more (Lee et al., 2016) (Ismail et al., 2018).

Solution: thus, increasing training capacity, addressing workforce burnout, and improving retention strategies (Lee et al., 2016; Ismail et al., 2018).

Figure 2
Share of Nursing Facilities Reporting Staffing Shortages, as of March 20th, 2022

NOTE: In Alaska and Arkansas, greater than 20% of nursing facilities did not report data and/or did not pass quality assurance and validation checks performed by the Centers for Medicare & Medicaid Services (CMS).
SOURCE: KFF analysis of CMS COVID-19 Nursing Home Data, as of the week ending on 3/20/2022. • PNG

DATA VISUALIZATION

A correlation is one of the common metrics used to understand the interaction between two or more variables, while mean/median is another metric that summarizes the distribution of a certain set of data which enables the visualization of trends and outcomes in healthcare(Bahri et al., 2018)(Ismail et al., 2018).

Solutions:

Interoperability
Big data analytics facilitates the creation of common data formats that enhance interoperability among EHRs(Bates et al., 2014).

Insurance
Predictive analytics: With the help of analyzing patient data, healthcare providers can gain insights into high-risk patients and subsequently take preventative measures to reduce insurance costs(Bates et al., 2014).

Healthcare Shortage
Analytics help with resource allocation by indicating areas that require healthcare professionals most, where recruitment efforts should be channeled, and training programs extended(Simpao et al., 2014).

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