Social Determinants of Health, Data, and Population Health

**NURSING INFORMATICS IMPACTING PATIENT CARE OUTCOMES**

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**Objectives**

1. Describe Nursing Informatics impact on patient care outcomes utilizing data specific to social determinants of health.
2. Discuss change management principles.
3. Identify Nursing Informatics role in meeting regulatory requirements to improve population health.
4. Discuss the future of data analytics in healthcare.

**Purpose**

This presentation will address the conceptualization of a nursing informatics theory and model geared toward change management and process improvement to address social determinants of health utilizing science, research, evidence-based practice, analytics and technology to improve population health.

**Nursing Informatics**

Nursing Informatics is the specialty that integrates nursing science with multiple information and analytical sciences to identify, define, manage, and communicate data, information, knowledge, and wisdom in nursing practice with compassion. (Nursing Informatics, Scope and Standards of Practice, Second Edition, 2014)

Nursing Informatics is the dynamic and systematic driving force of communication, collaboration and consistency integrating nursing science and nursing process with informational, analytical, biomedical, transformational and social sciences to create synergistic innovation that formulates data, information, knowledge and wisdom for the delivery of quality and safe care—every patient/family/community, every encounter, every opportunity, every day. (Chasco, D., 2019).

**Nursing Informatics Synergy Model**

[Diagram of the Nursing Informatics Synergy Model]

Research is creative, synergistic and systematic work to increase the knowledge of culture, society and human beings in different settings. It entails utilizing this knowledge to develop new methods & approaches to improve current applications that are evidence-based, reliable and valid.

**Utilization of Principles**

- The intent of this presentation is to:
  - Utilize the model presented today in nursing informatics practice settings
  - Share outcomes and experiences
  - Document findings

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[Diagram of the Nursing Informatics Synergy Model]
Disparities of Care

Disparities of care reach beyond borders. Health care access, social determinants of health, environmental, social, biological and genetic factors make disparities of care a complex and multifocal challenge.

Diversity, language and culture make the world rich and abundant. Quality care and health care access opportunities exist throughout the world.

Nursing Informatics can lead healthcare organizations through innovation and collaborative efforts in addressing language, culture and disparities of care and in aggregating data that leads to improved patient outcomes while addressing population health.

CDC Definitions:
https://www.cdc.gov/nchhstp/socialdeterminants/definitions.html

The “Why” and “How” of Addressing Change

Change Management Principles in addressing social determinants of health, language, culture and disparities of care:
1. Wellness versus illness models of care
2. Evidence-based practice and research
3. Leadership focus on disparity, culture and language [mission and vision statement]
4. Nursing leaders at governmental decision-making sessions
5. Validation of data that drives change (actionable data analytics)
6. Integration and collaboration

UMC El Paso’s Focus on Disparities of Care

1) Implementation of a Medical Legal Partnership to address access to healthcare for the community
2) Multilingual Health Clinic (24 languages) providing care
3) Even Flow Programs for patients with high volume care
4) Nurse Clinics for vulnerable patient population
5) Nurse Family Partnership
6) Provider education on providing patient care in needed for high patient population
7) Weekly meetings addressing high utilization populations with community and data collaboration through DSRIP

Accountable Care Organizations

ACO: Accountable Care Organizations are doing the right thing for the right reason(s) with the right data at the right time for the right price safely and efficiently for the population served (population health).
The Internet of Things (IoT)

The Internet of Things is gathering and analyzing data in real time. It is not just communication from one machine to another. It is more global than this. It is about sensor and machine communication and leveraging, analyzing the data and validating the data to make a difference in patient outcomes.

Tools are available to all of us. It is in how we interpret and use the tools in real-time via the cloud. If it is not interpreted and analyzed in real-time, how useful is the data? We are focusing on patient care and patient outcomes. In order for the data to be utilized effectively, efficiently, and validated, it must be real-time data.

Disruptive Innovation- IoT is an example.

Contact Information

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Video: The Internet of Things in Health Care