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POSTMIDYEAR

15
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15 febrero 2023

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MÁS PROCESOS

"*Tecnología y Salud Digital*"

EMILIO MONTE BOQUET


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MIDYEAR2022
Clinical Meeting & Exhibition

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ANALÍTICA DE DATOS

OTROS

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Educational Sessions | Integrated Informatics Institute

Digital Health 101: Interventions for Maximum Pharmacist Impact

Monday, December 5, 2022 2:00 PM – 3:00 PM

Location: Mandalay Bay South Convention Center, Mandalay Bay B, Level 2 CE Credits: 1.00 contact hours

Activity #: 0204-0000-22-235-L04-P
Activity Type: Knowledge-based
Target Audience: Pharmacist

Learning Objectives:

- Discuss digital health interventions currently in use by pharmacists.
- Given a case scenario, identify remote patient monitoring opportunities for pharmacists.

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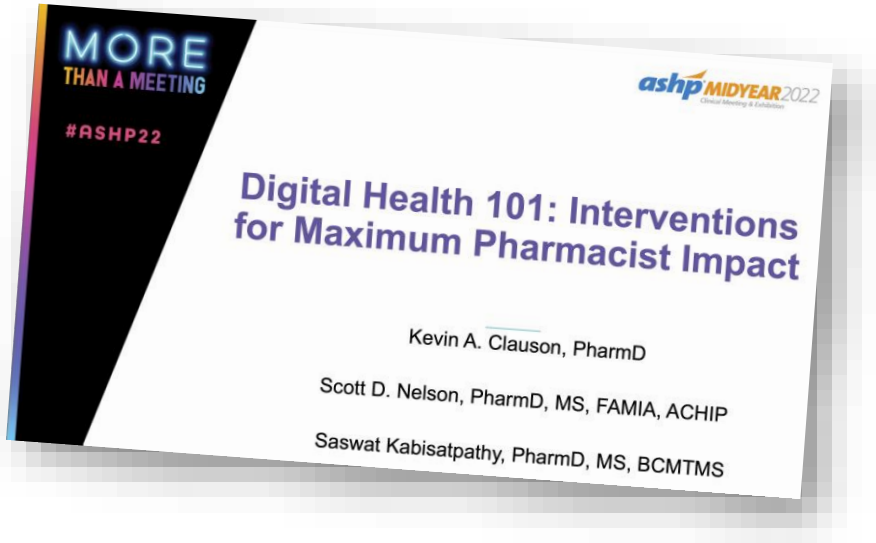
Nos contaron…



- Introducción a la salud digital
- Ejemplos de salud digital en FH
  - Adherencia
  - Monitorización remota de pacientes
- Limitaciones y consideraciones sobre la monitorización remota

Me quedo con…

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Where does most healthcare **actually take place**?

Most healthcare still takes place OUTSIDE the healthcare system

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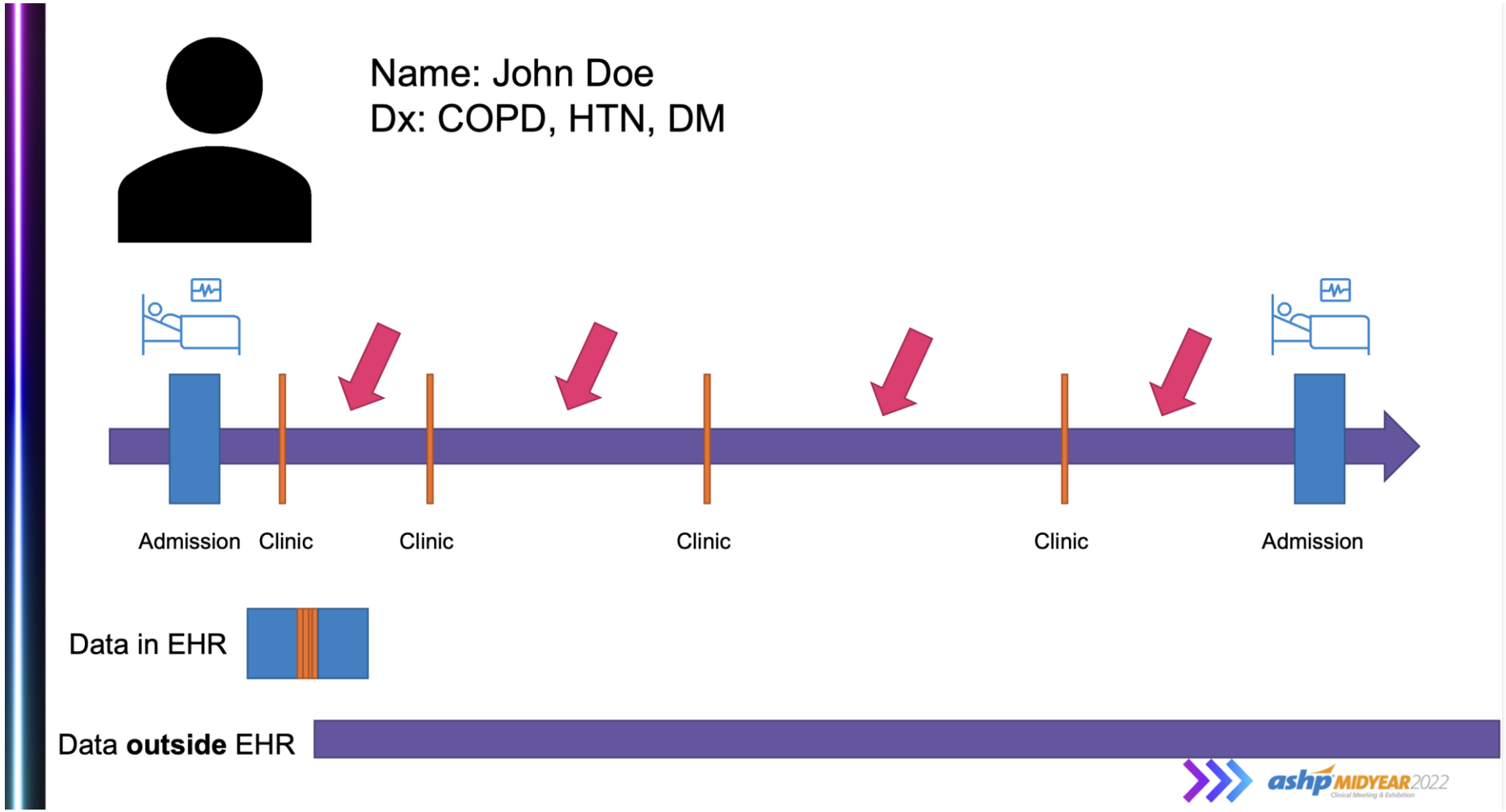

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Digital health is the field in informatics that studies what happens where most healthcare actually takes place

(i.e., OUTSIDE of the healthcare system)

Digital Health

Healthcare that occurs in **between** medical visits:

+ prioritizes the patient perspective
+ leverages technology

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+ focus on technology

+ focus on the patient perspective

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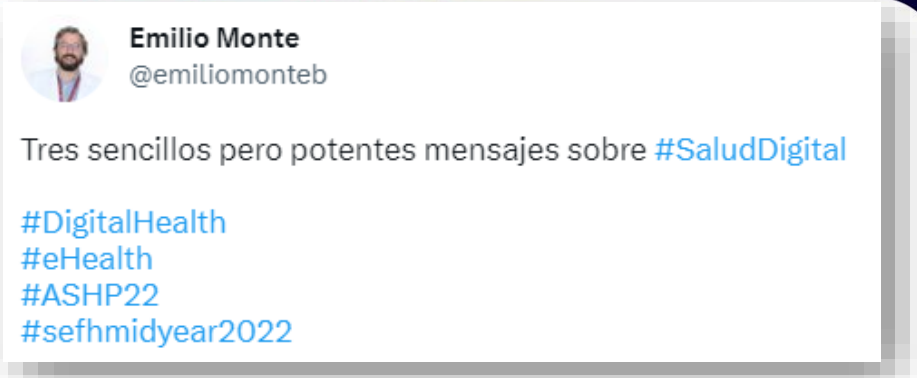
Key Takeaways



1) **MOST HEALTHCARE OCCURS BETWEEN VISITS**
The information currently in the EHR is just a fraction of a patient's care.

2) **DIGITAL HEALTH IS GROWING**
Especially in the patient space with adherence apps and remote patient monitoring.

3) **MANY CHALLENGES STILL EXIST**
Especially with health equity and the "digital divide"

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Educational Sessions | Innovation

The Future of Clinical Pharmacy Practice: Leveraging an Integrated Telehealth Team-Based Model

Wednesday, December 7, 2022 2:00 PM – 3:30 PM

Location: Mandalay Bay South Convention Center, Lagoon F, Level 2 CE Credits: 1.50 contact hours

Activity #: 0204-0000-22-326-L04-P
Activity Type: Application-based
Target Audience: Pharmacist

Learning Objectives:

- Identify the need for interdisciplinary telehealth team models that integrate the pharmacist practitioner.
- Develop foundational elements needed to justify the implementation of a telehealthcare team.
- Describe the impact of telehealth models on the future delivery of clinical pharmacy services.
- Evaluate aspects of telehealth model development for impact on services provided.

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Nos contaron…

- Impacto de la salud digital en el acceso a la atención sanitaria
- Ejemplo de un modelo de telesalud innovador a escala nacional (Hospitales de Veteranos, USA)
  - Descripción e implementación
  - Equipo multidisciplinar y funciones de cada miembro
  - Resultados y experiencia del paciente
- Estrategias de implementación de un modelo de telesalud
- Integración del farmacéutico en los equipos interdisciplinares de salud digital
- Estrategias de difusión

Me quedo con…

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Emilio Monte
@emiliomonteb

En Estados Unidos tienen claro que el futuro de la práctica de la farmacia clínica pasa, entre otras cosas, por el establecimiento de un modelo multidisciplinar integrado de salud digital

#telefarmacia #eHealth

#ASHP22 #sefhmidyear2022

Emilio Monte
@emiliomonteb

Todo empieza con la visión de que la salud digital mejora la accesibilidad, capacidad, calidad y experiencia de los pacientes y sus cuidadores

#telefarmacia #eHealth

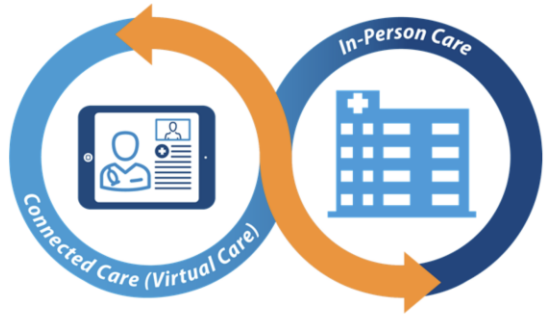
#ASHP22 #sefhmidyear2022

CONNECTED CARE

It Starts with a Vision

Leverage connected technologies to enhance the **accessibility**, **capacity**, **quality** and **experience** of health care for patients, their families, and their caregivers anywhere in the country.

Connected Care will be effectively **integrated** into the daily lives of both clinicians and the patients they serve



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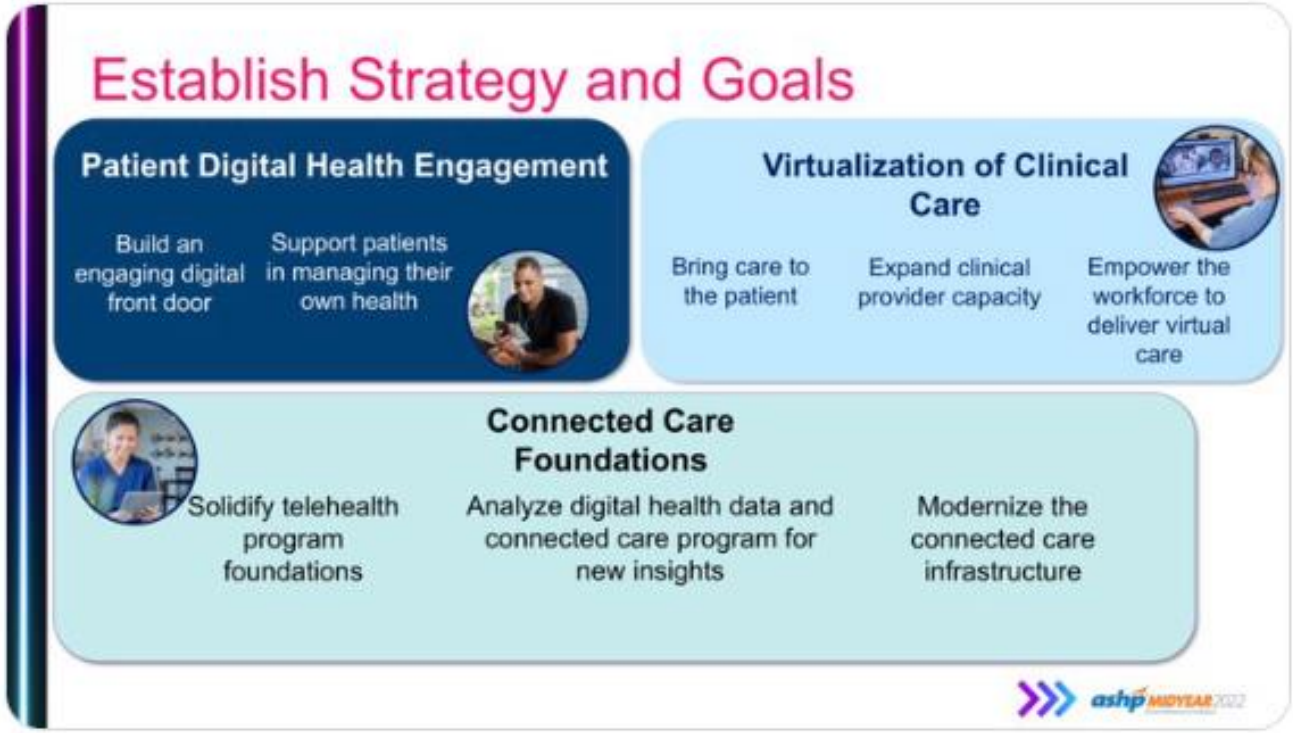
Emilio Monte
@emiliomonteb

Y requiere establecer una estrategia y unos objetivos concretos

#telefarmacia #eHealth

#ASHP22 #sefhmidyear2022



CPP: Clinical Pharmacist Practitioner

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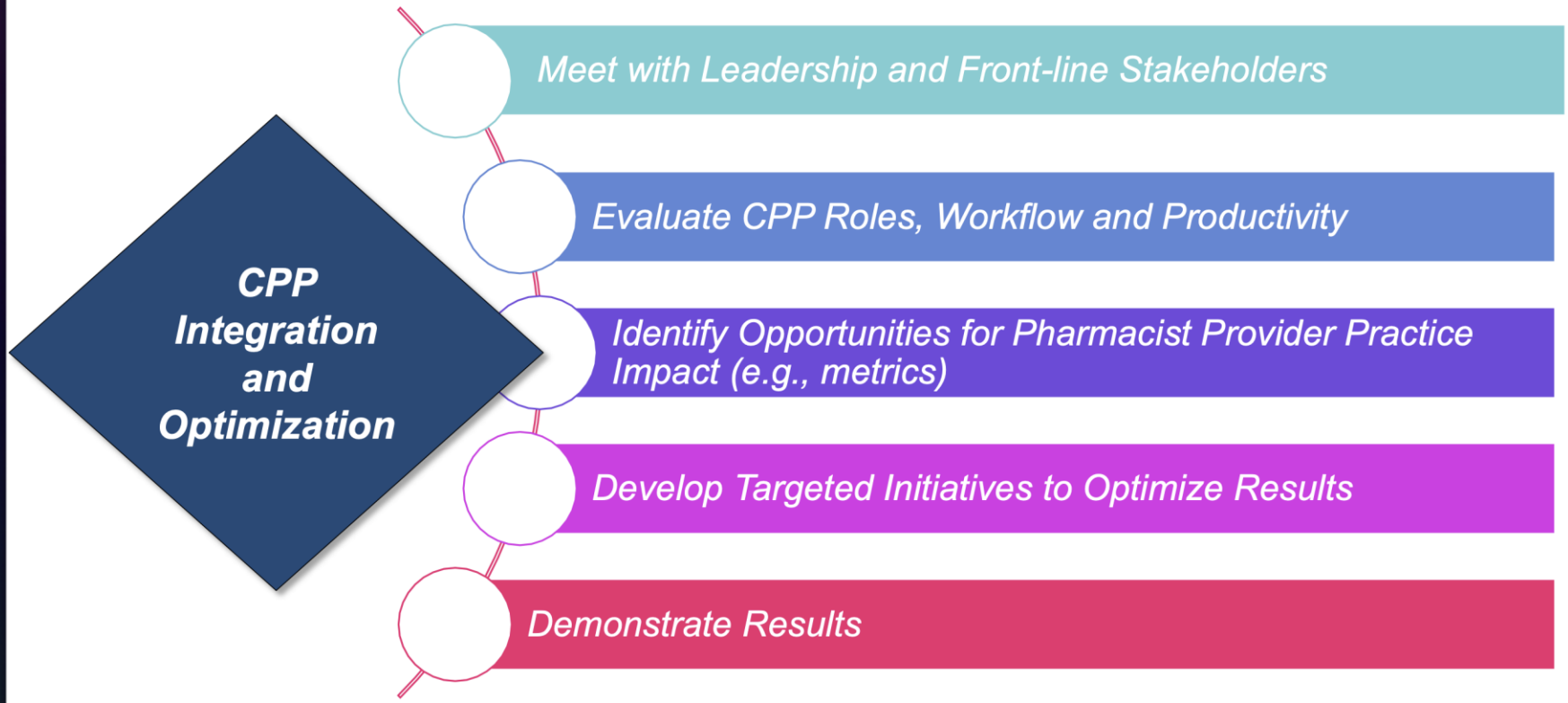
Strategies for CPP Expansion



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Defining MH CPP Telehealth Team Role

- Provide comprehensive medication management across full spectrum of mental health disorders
  - Consultative or Primary Prescriber
  - Utilize MH instruments to monitor medication effectiveness
  - Referral for diagnosis, psychotherapy, acute care, etc.
  - Complete suicide risk assessment and safety planning
- Provide comprehensive medication management for substance use disorders
  - Screening as well as referral for diagnosis
  - Medication education and referral for other needed care (psychotherapy, housing assistance, acute care needs)
  - Implement risk mitigation strategies

Defining Cardiology CPP Telehealth Team Role

- Provide comprehensive medication management across full spectrum of cardiac disease states.
  - Consultative model (referrals from all team members)
  - Medication education and referral for other needed care (ECHO, dietitian, diagnostic evaluation, etc.)
  - Enroll in Home Telehealth Programs (use technology to report back to nurse manage, daily weights, BP, pulse)

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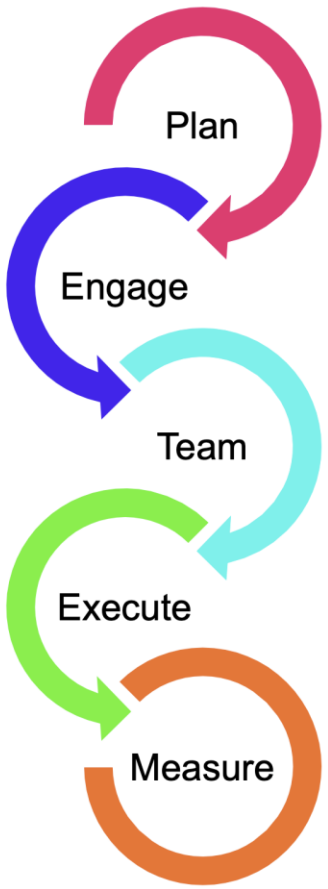

Strategies for Change: Reflect and Share

- Define the “what” and “why”
  - Define the need, practice area for focus and types of telehealth modalities for use.
- Define the “who” and “how”
  - Describe which CPP and other team members will contribute to the model and work through implementation strategies.
- Define your implementation timeline
  - Start with the end in mind
  - When will you start and complete implementation, what steps may need to happen along the way.

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Key Takeaways

1) Telehealth is evolving at a rapid pace and clinical pharmacy practice is at the forefront.

2) Developing a comprehensive approach to telehealth services ensures successful program integration across the enterprise.

3) Telehealth models of care bring the CPP closer to the patients they treat and teams they serve.

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Educational Sessions

(Management Case Study) Multi-State Remote Order Verification (ROV) to Support Acute Care Inpatient Pharmacies Across an Integrated Delivery Network (IDN)

Wednesday, December 7, 2022 8:45 AM – 9:15 AM

Location: Mandalay Bay South Convention Center, South Seas D, Level 3 CE Credits: 0.50 contact hours

Activity #: 0204-0000-22-380-L04-P
Activity Type: Knowledge-based
Target Audience: Pharmacist

Learning Objectives:

- List considerations for establishing a Multi-State Remote Order Verification Department.
- Describe the use of effective tools for leadership of a remote multi-state team of pharmacists.
- Summarize standards for communication and monitoring parameters to ensure success with centralized pharmacy services.

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Nos contaron…

- Cómo implementar un sistema de validación remota multi-estado de órdenes médicas
  - Aspectos claves previos
  - Aspectos operativos
  - Proceso de aceptación, compromiso y plan de comunicación
- El uso efectivo de herramientas de liderazgo de un equipo de farmacéuticos multi-estado
- Necesidad de establecer métricas y dar feedback continuo para asegurar y mantener el proceso en el tiempo

Me quedo con…

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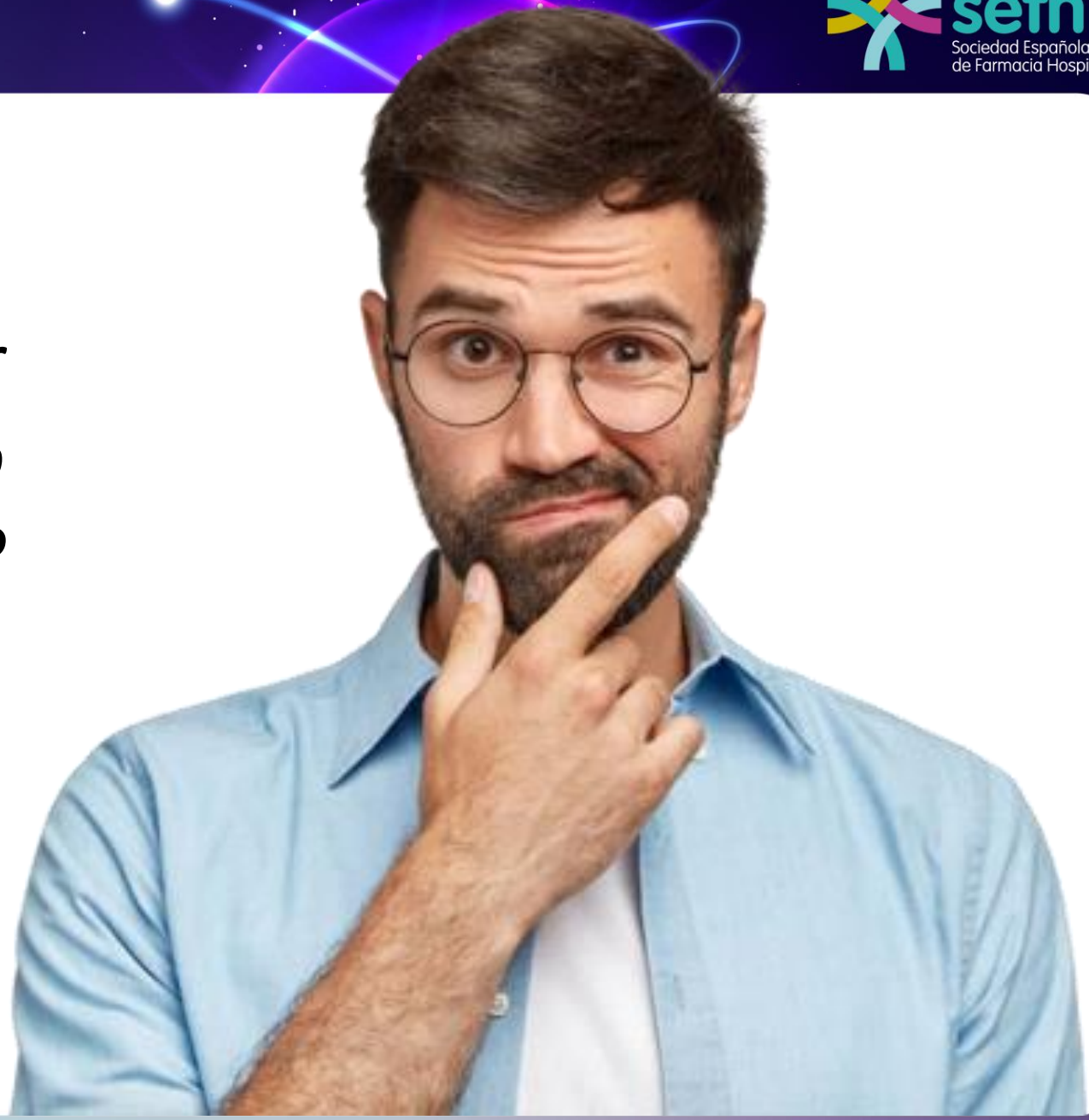
¿Podría tener utilidad en nuestro entorno?



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INTELIGENCIA ARTIFICIAL

Educational Sessions | Integrated Informatics Institute

Validated Artificial Intelligence: The Future of Pharmacy and its Applications

Sunday, December 4, 2022 12:30 PM – 2:00 PM

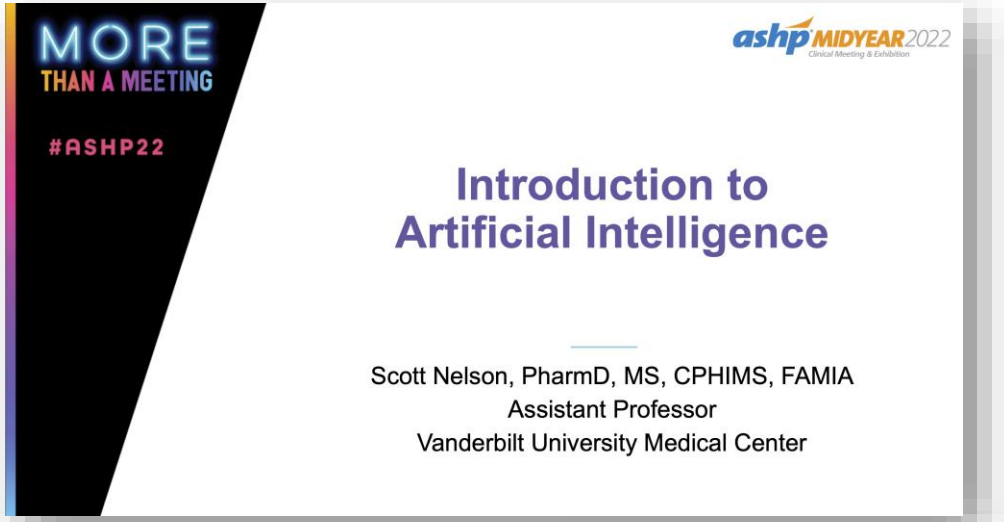
Location: Mandalay Bay South Convention Center, Oceanside D, Level 2 CE Credits: 1.50 contact hours

Planned in cooperation with the ASHP Section of Informatics and Technology
Activity #: 0204-0000-22-219-L04-P
Activity #: 0204-0000-22-219-L04-T
Activity Type: Application-based
Target Audience: Pharmacist, Pharmacy Technician

Learning Objectives:

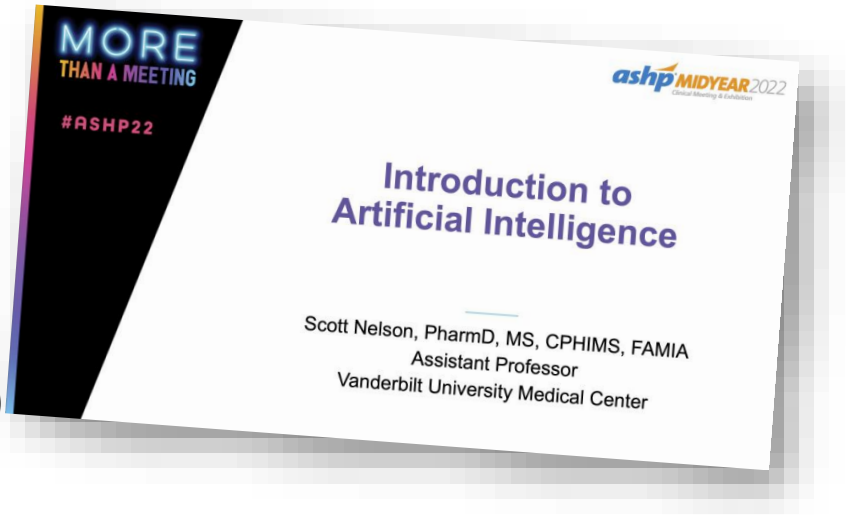
- Identify opportunities in health-system pharmacies where artificial intelligence (AI) can be used.
- Describe suitable scenarios for automated order verification.
- List factors involved in medication robotic delivery turnaround time.
- Apply leadership strategies to incorporate advanced technologies for health-system pharmacies.

INTELIGENCIA ARTIFICIAL



INTELIGENCIA ARTIFICIAL

Nos contaron…



- Qué es la IA
- Tipos de IA (inteligencia artificial, machine learning, redes neuronales, aprendizaje profundo)
- Utilidad y ejemplos de IA en salud
- El poder (y la necesidad) de la interacción entre el humano y la máquina

Me quedo con…

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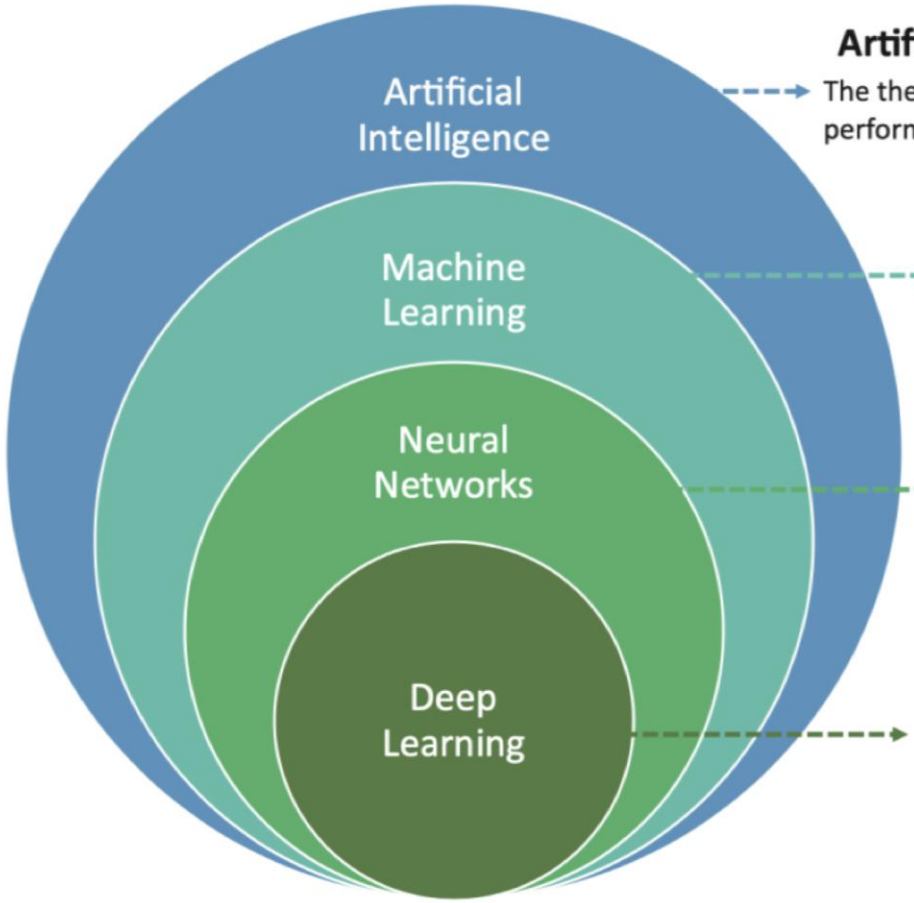


Artificial Intelligence (AI)
The theory and development of computer systems to perform tasks that normally would require human cognition.

Machine Learning (ML)
A mathematical approach to learning the unknown rules that govern a particular phenomenon by analyzing many examples of it happening.

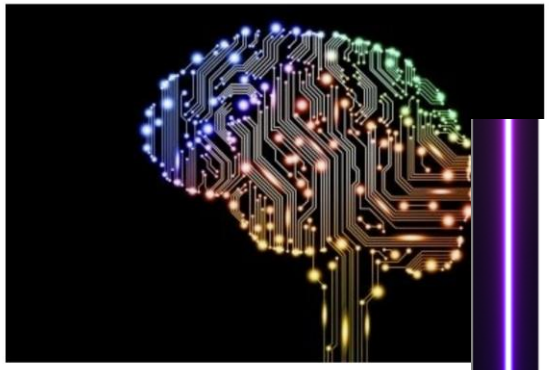
Neural Networks (NN)
Machine learning models inspired by nervous system architecture, in which complex mathematical rules are learned by composing many simple patterns.

Deep Learning (DL)
Neural Network models in which the composition of simple patterns occurs in greater depth, allowing for very complex rules to be learned.

Am J Health Syst Pharm. 2020; 77(19): 1556-70. PMID: 32620944

INTELIGENCIA ARTIFICIAL

Will AI replace me?



AI = “Augmented Intelligence”

- Pharmacists excel at:
  - **Common sense**
  - **Compassion**
  - **Context**
  - Dilemmas
  - Morals
  - Imagination
  - Abstraction
  - Generalization
- AI systems excel at:
  - **Pattern identification**
  - **Endless capacity**
  - Natural language processing
  - Locating knowledge
  - Machine learning
  - Minimizing bias

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"The rise of machines has to be accompanied by heightened humaneness — **with more time together, passion and tenderness** — to make the 'care' in healthcare real"

- *Eric Topol*

Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again (2019)

INTELIGENCIA ARTIFICIAL

Considerations

- "All models are wrong, but some are useful"

  – *George Box*

- The ultimate decisions are in the hands of the patients and caregivers
- **Implementation is key** and is its own science
- Beware of bias
- Beware of Model Drift
  - Models grow stale over time as clinical practice changes

Am J Health Syst Pharm. 2020; 77(19): 1556-70. PMID: 32620944

INTELIGENCIA ARTIFICIAL

Mind the gap

- "A key challenge of AI in the medication-use process can be the gap between
  - the clinicians who understand the problems,
  - the developers who create the models,
  - and the administrators who make the decisions about which AI solutions to finance."

Am J Health Syst Pharm. 2020; 77(19): 1556-70. PMID: 32620944

INTELIGENCIA ARTIFICIAL

Nos contaron…

- Qué es la validación basada en reglas y su utilidad en el ámbito hospitalario
- El proceso de evaluación de la validación basada en reglas
- Los primeros resultados de un sistema de validación basado en reglas

Me quedo con…

INTELIGENCIA ARTIFICIAL

"Hours spent by health-system pharmacists prospectively analyzing medication orders are hours lost to the next-best, patient-focused, alternative activity."

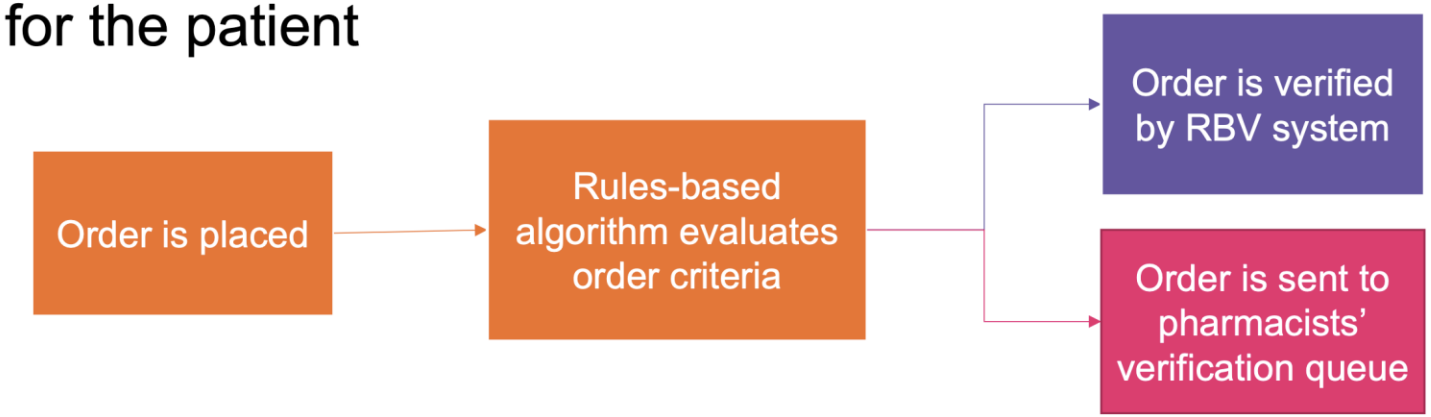
- Allen J. Flynn, 2009

Am J Health-Syst Pharm- Vol 66 Apr 1, 2009

INTELIGENCIA ARTIFICIAL

Rules-Based Verification (RBV)

- Auto-verification is the verification of orders with an automated computer system, rather than by a pharmacist, prior to dispensing
- A rules-based algorithm evaluates patient- and medication-specific criteria to determine whether the order is appropriate for the patient



INTELIGENCIA ARTIFICIAL

Study Objectives

1

Proof of Concept

Can we build rules/algorithms replicating human process

2

Compare Outcomes

Compare the outcome of rules-based verification to pharmacist verification of select medications

3

Measure Time

Measure time required for pharmacists to verify orders evaluated by the rules-based verification criteria

INTELIGENCIA ARTIFICIAL

Discussion

- Validated proof of concept
- RBV closely approximates the verification decisions of a pharmacist with little discordance
- Due to the stringency of the RBV rules, there were a fair number of orders that did not pass RBV, but were still verified by a pharmacist
- Best practice and quality improvement opportunities
- Additional studies to measure safety and quality improvement
- Deployment prospects
- Regulatory challenges

INTELIGENCIA ARTIFICIAL

Key Takeaways

- Pharmacist verification of medication orders is time consuming and can be protocolized for common orders
- RBV leverages the ability to protocolize orders in a manner that approximates a pharmacist's verification of the same order
- The data suggest that it is likely that RBV can be safely implemented in the inpatient setting
- Seeking regulatory approval for inpatient RBV is a reasonable next step

INTELIGENCIA ARTIFICIAL

Nos contaron…

Key Takeaways

1) **Soft dollar impacts.** No HR-related issues. No grievance. No call-out sick. No hang out in the hallway. Does not fight for lunch break coverage. Less gossip ☺

2) **Annual robot savings= $17,832**

3) **Consider the use and expansion of the robot to other areas of the hospital.** Code cart delivery. Central pharmacy to ICU units.

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INTELIGENCIA ARTIFICIAL

Educational Sessions | Innovation

Session Name: Pharmacy Power Hour

Protect the Women & Children: Machine Learning Methods to Predict Adverse Drug Events (ADEs)

Wednesday, December 7, 2022 10:00 AM – 11:00 AM

Location: Mandalay Bay South Convention Center, Oceanside A, Level 2 CE Credits: 1.00 contact hours

Activity #: 0204-0000-22-321-L05-P
Activity Type: Knowledge-based
Target Audience: Pharmacist

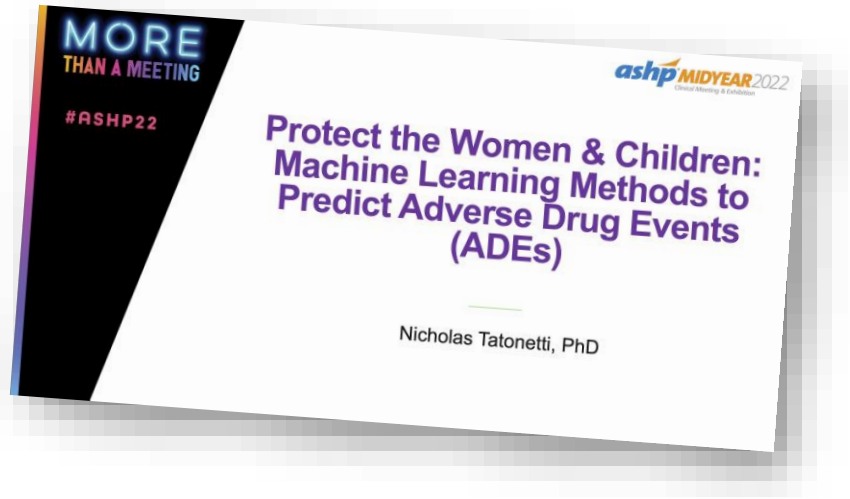
Learning Objectives:

- Discuss ongoing database development focused on predicting drug event risks in pediatric patients.
- Summarize pharmacovigilance algorithms that leverage machine learning to predict sex risks.

INTELIGENCIA ARTIFICIAL

Nos contaron…

- El desarrollo de bases de datos centradas en la predicción de riesgos de eventos adversos relacionados con medicamentos en pacientes pediátricos



- Algoritmos de farmacovigilancia que aprovechan el machine learning para predecir el riesgo de eventos adversos relacionados con medicamentos en mujeres

Me quedo con…

INTELIGENCIA ARTIFICIAL

- Uso del machine learning para identificar los efectos adversos de los fármacos que suponen un mayor riesgo para las mujeres

  → Permite identificar diferencias de sexo en los acontecimientos adversos cuando los patrones de uso entre sexos están sesgados

- Un enfoque sistemático y basado en datos para obtener información observacional y mecanicista sobre los efectos adversos de los medicamentos pediátricos

  → Permite aumentar la potencia en estudios de efectos adversos en pacientes pediátricos en los que el tamaño de la muestra es muy bajo o inexistente

INTELIGENCIA ARTIFICIAL

Emilio Monte
@emiliomonteb

Utilización de la #InteligenciaArtificial y el #MachineLearning para prevenir efectos adversos en mujeres y niños, grupos de población con mayor riesgo de sufrirlos

Espectacular el trabajo y la exposición de @nickgiangreco 👏👏

#SeguridadDelPaciente
#ASHP22 #sefhmidyear2022

Conclusions

- dGAMs were more powerful through sharing information across child development
- We created an integrated methodology based on biologically-inspired modeling of ADE observations across childhood
- Evaluating dynamic drug risks illuminated:
  - When medications were risky
  - How risk profiles changed across childhood
  - Which biological mechanisms coincided with pediatric drug risks

Nicholas Giangreco, PhD

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ANALÍTICA DE DATOS

Educational Sessions | Integrated Informatics Institute

Data in Action: Building a Pharmacy Data Analytics Strategy

Tuesday, December 6, 2022 9:30 AM – 10:45 AM

Location: Mandalay Bay South Convention Center, Mandalay Bay B, Level 2 CE Credits: 1.25 contact hours

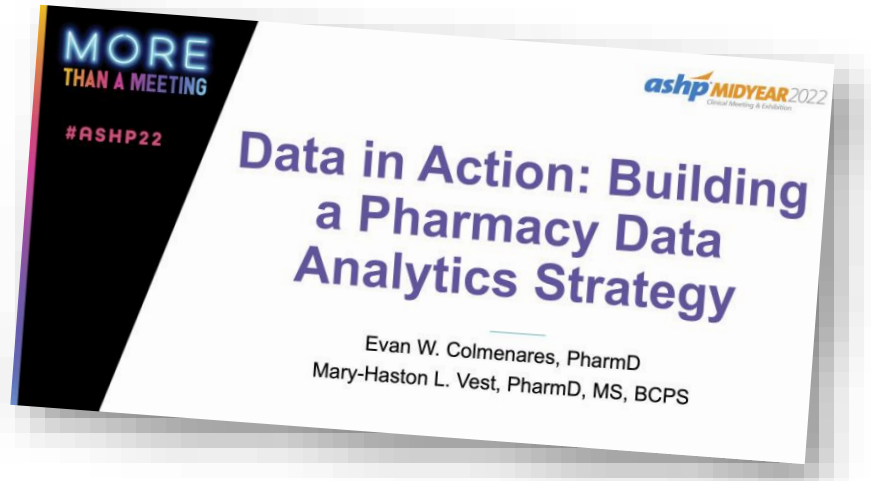
Planned in cooperation with the ASHP Section of Informatics and Technology and the ASHP Section of Pharmacy Practice Leaders

Activity #: 0204-0000-22-278-L04-P
Activity #: 0204-0000-22-278-L04-T
Activity Type: Knowledge-based
Target Audience: Pharmacist, Pharmacy Technician

Learning Objectives:

- Describe why data and analytics are becoming increasingly important in pharmacy.
- Explain the trajectory of the Pharmacy Analytics and Outcomes Team at UNC Health.
- Identify the challenges faced by the analytics team during their growth.
- Discuss a plan to start assessing the environment for analytics at your organization.

ANALÍTICA DE DATOS



Nos contaron…

- Por qué los datos y la analítica son cada vez más importantes en farmacia
- La trayectoria del equipo de análisis y resultados farmacéuticos de UNC Health (North Carolina)
- Cuales fueron los retos a los que se ha enfrentado el equipo de análisis durante su desarrollo
- Su plan para empezar a evaluar el entorno de la analítica en su organización

Me quedo con…

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The Opportunity

To thrive, modern health care organizations must become data driven. Multiple data sources are available across the continuum of care – do you know where all your data lives?

ANALÍTICA DE DATOS

Pharmacy Data Management

- **Pharmacy is one of the largest generators of data within healthcare systems**
  - Medication procurement and inventory management
  - Operational workflows
  - Medication-use process
  - Outcomes
- Aggregating data into a single, usable system, such as a data warehouse, makes these data accessible and actionable
- These efforts require the development of a formal data strategy and investment in analytics resources

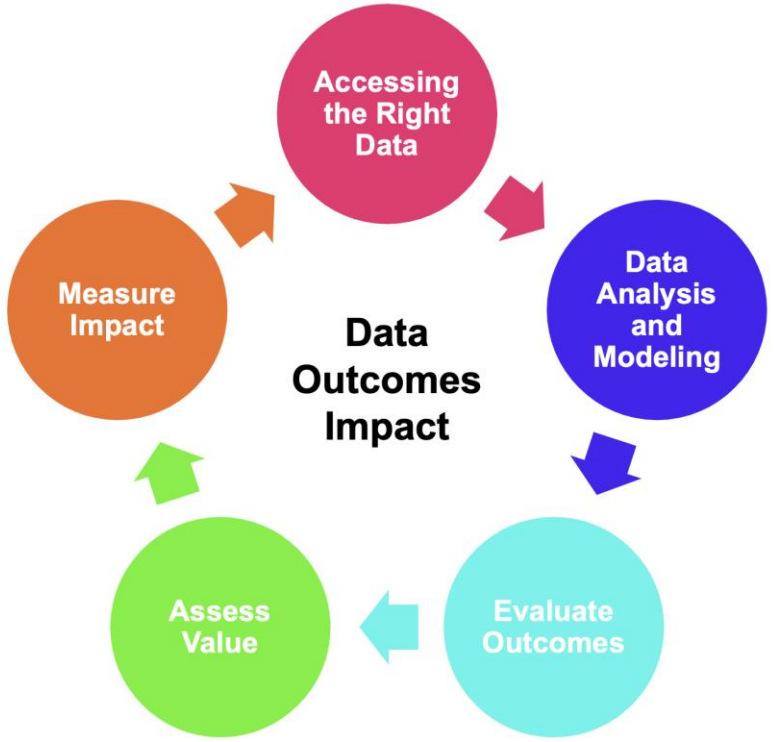
ANALÍTICA DE DATOS

The New Step in the Medication Use Process

Pharmacy reporting and analytics should require the same depth of scrutiny and oversight as any other step in the medication-use process where pharmacy is held accountable.

ANALÍTICA DE DATOS

What's Our Impact?



ANALÍTICA DE DATOS

Build Your Pharmacy Data Management Strategy

Access to Data Sources

- EHR
- Automation
- Claims
- Supply Chain/Inventory

Invest in Infrastructure

- Analyst
- Data Architect
- Medication Expertise

Departmental Buy-In

- Metric and KPI development
- Day-to-day data-driven management
- Data-driven Strategy
- Balance Scorecard development

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ANALÍTICA DE DATOS

Educational Sessions

(Management Case Study) Implementation of an Electronic Scoring System to Prioritize Clinical Pharmacy Services

Tuesday, December 6, 2022 10:15 AM – 10:45 AM

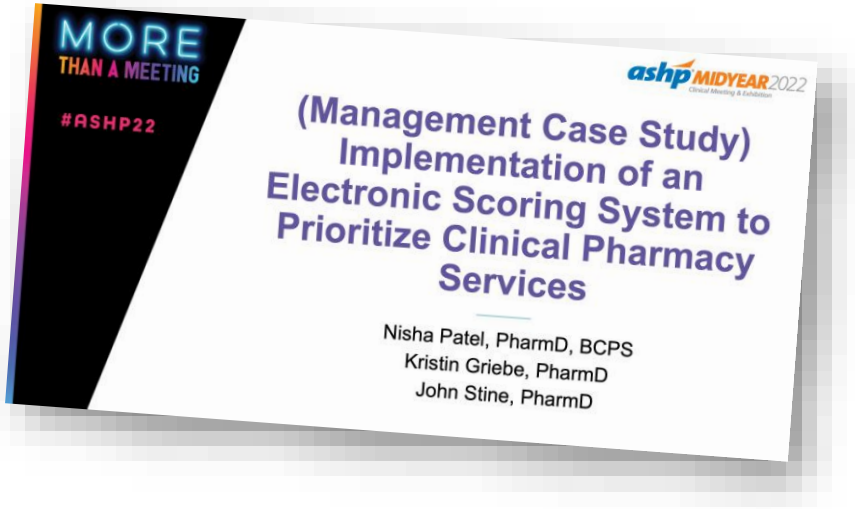
Location: Mandalay Bay South Convention Center, South Seas D, Level 3 CE Credits: 0.50 contact hours

Activity #: 0204-0000-22-374-L04-P
Activity Type: Knowledge-based
Target Audience: Pharmacist

Learning Objectives:

- Describe systematic process strategies to align clinical pharmacy services across a health system.
- Describe how a systematic process can improve the workload for health-system pharmacists.
- List ways a systematic process in the electronic health record can be used to expand clinical pharmacy services provided to patients.

ANALÍTICA DE DATOS



Nos contaron…

- Estrategias basadas en procesos sistemáticos para alinear los servicios de farmacia clínica en un sistema sanitario
- Cómo un proceso sistemático puede mejorar la carga de trabajo de los farmacéuticos del sistema sanitario
- Las formas en que la implementación de un proceso sistemático sobre la historia clínica electrónica puede utilizarse para expandir los servicios de farmacia clínica prestados a los pacientes

Me quedo con…

ANALÍTICA DE DATOS

Aligning with the Shifting Healthcare Landscape

ASHP Pharmacy Forecast

Scope of the Pharmacy Enterprise:

Volume of Care → Value-Based Care

DiPiro JT, et al. *Am J Health-Syst Pharm.* 2021; 78(6):472–497.
Centers for Medicare & Medicaid Services. Quality Measures. [Accessed 2022 Mar 3]. Available from: https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/qualitymeasures.
Acquisto NMJ, et al. *Am Coll Clin Pharm.* 2021; 4:1601-1617.

ANALÍTICA DE DATOS

Need for a Systematic Process to Address Initiatives

- Standardize approach to clinical pharmacy services
- Staffing and workload distribution
- Document Pharmacist Value
- Diverse Health-System with various practice models

ANALÍTICA DE DATOS

Purpose of the Electronic Scoring System

- Prioritize clinical pharmacy services, triage patients, increase efficiency
- Target complex patients at high risk for readmissions and high resource utilizers
- Increase safety, interventions, and documenting activities
- Streamline and standardize workflow

ANALÍTICA DE DATOS

Scoring System

- A total score is assigned to each patient
- Based on the individual variables scored for that patient
  - 75 variables to date
- Updates automatically in real-time in the EHR
- Can use the variables to manually complete or hand off (“defer”) variables if necessary
- Can document on the total score and/or on each individual variable
- Can pull data retrospectively based on documentation on the total score or variable

EHR: electronic health record

ANALÍTICA DE DATOS

Top Priority Variables

- Pharmacy to dose consults
- Dosing by levels
- Out-of-range medication lab values
- Renal function changes and renally dosed medications
- High-risk medications
- High-acuity patients (i.e., mechanical ventilation, vasopressor support, MCS device)

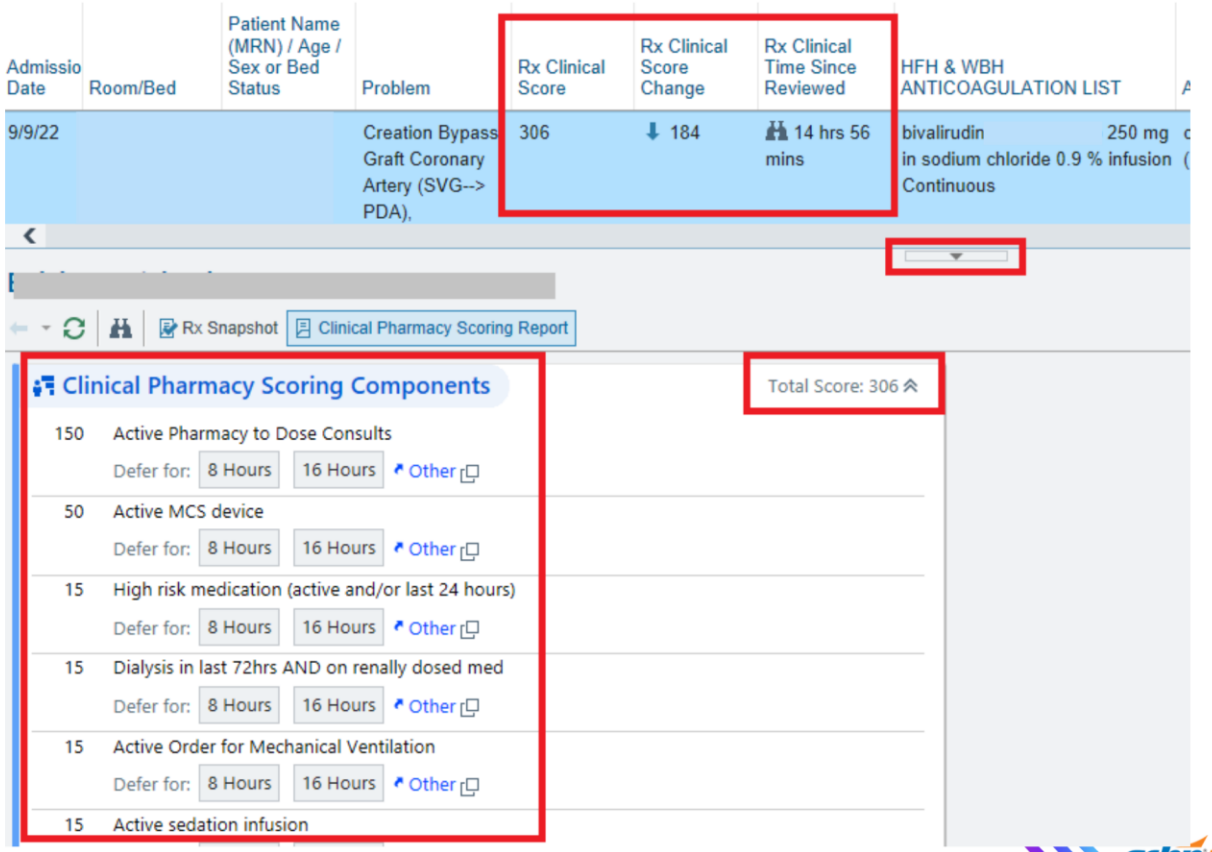
MCS: mechanical circulatory support

ANALÍTICA DE DATOS

Using the Scoring System in the Electronic Health Record

Total score

Score breakdown (variables)



ANALÍTICA DE DATOS

Key Takeaways

1. Collaborating with pharmacists in IT, all specialty areas, and leadership is crucial to creating a comprehensive scoring system that aligns with the goals of the pharmacy enterprise.
2. Developing an electronic scoring system can help triage patients and prioritize clinical pharmacy services across a diverse health system.
3. Data and continuous improvements of the electronic scoring system can improve uptake of the innovative process.

POSTMIDYEAR ASHP *More than a meeting*

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ANALÍTICA DE DATOS

Educational Sessions

(Management Case Study) Leveraging Data Science to Transform Pharmacy Department Operations in an Academic Medical Center

Monday, December 5, 2022 4:15 PM – 4:45 PM

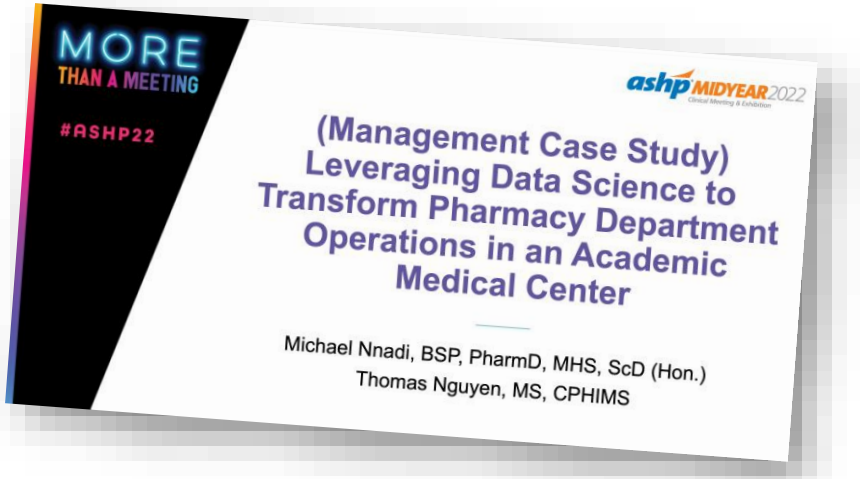
Location: Mandalay Bay South Convention Center, South Seas D, Level 3 CE Credits: 0.50 contact hours

Activity #: 0204-0000-22-370-L04-P
Activity #: 0204-0000-22-370-L04-T
Activity Type: Knowledge-based
Target Audience: Pharmacist, Pharmacy Technician

Learning Objectives:

- Describe the benefits of using Tableau® vs. Microsoft Excel® to distribute a dashboard.
- Describe the benefits of a Monthly Operating Report presentation for the organization/leadership.
- Describe the process of converting an existing Excel® dashboard into a Tableau dashboard.

ANALÍTICA DE DATOS



Nos contaron…

- Las ventajas de utilizar Tableau® frente a Microsoft Excel® para distribuir un cuadro de mando
- Las ventajas de una presentación del informe operativo mensual para la organización/dirección
- El proceso de conversión de un cuadro de mando Excel® existente en un cuadro de mando Tableau®.

Me quedo con…

ANALÍTICA DE DATOS

- "La información es el petróleo del siglo XXI, y la analítica es el motor de combustión" (Peter Sondergaard Gartner Research)
- La visualización y el análisis de datos son fundamentales para transformar los datos brutos en datos con significado (conocimiento)
- Las plataformas de análisis no son sólo aplicaciones de visualización de datos, deben servir como herramientas para consolidar y manipular datos

…hay que explorar nuevas herramientas

TELEFARMACIA

INTELIGENCIA ARTIFICIAL

ANALÍTICA DE DATOS

OTROS

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OTROS

Educational Sessions | Integrated Informatics Institute

The Time Is Now: Advancing Technician Roles in Informatics

Monday, December 5, 2022 3:30 PM – 5:00 PM

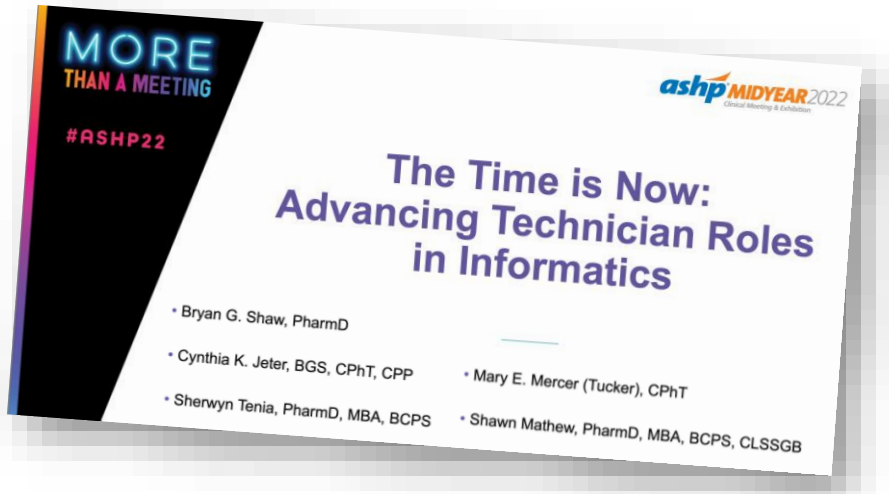
Location: Mandalay Bay South Convention Center, Mandalay Bay B, Level 2 CE Credits: 1.50 contact hours

Planned in cooperation with the ASHP Section of Informatics and Technology
Activity #: 0204-0000-22-251-L04-P
Activity #: 0204-0000-22-251-L04-T
Activity Type: Application-based
Target Audience: Pharmacist, Pharmacy Technician

Learning Objectives:

- Evaluate the roles that pharmacy technician informaticists can fill on the pharmacy team.
- Differentiate the role of the pharmacy technician informaticist from that of an informatics pharmacist.
- Develop a plan for how to implement pharmacy technician informaticist roles in the organization.

OTROS



Nos contaron…

- Evaluar las funciones que pueden desempeñar los técnicos en farmacia informáticos en el equipo de farmacia
- Diferenciar la función del técnico en farmacia informático de la del farmacéutico informático
- Desarrollar un plan sobre cómo implantar las funciones del técnico informático en farmacia en la organización

Me quedo con…

OTROS

Definition: Pharmacy Informatics (PI)

- Pharmacy Informatics is a subspecialty of HIT
- "…the use and integration of data, information, knowledge, and technology, and automation in the medication-use process for the purpose of improving health outcomes."

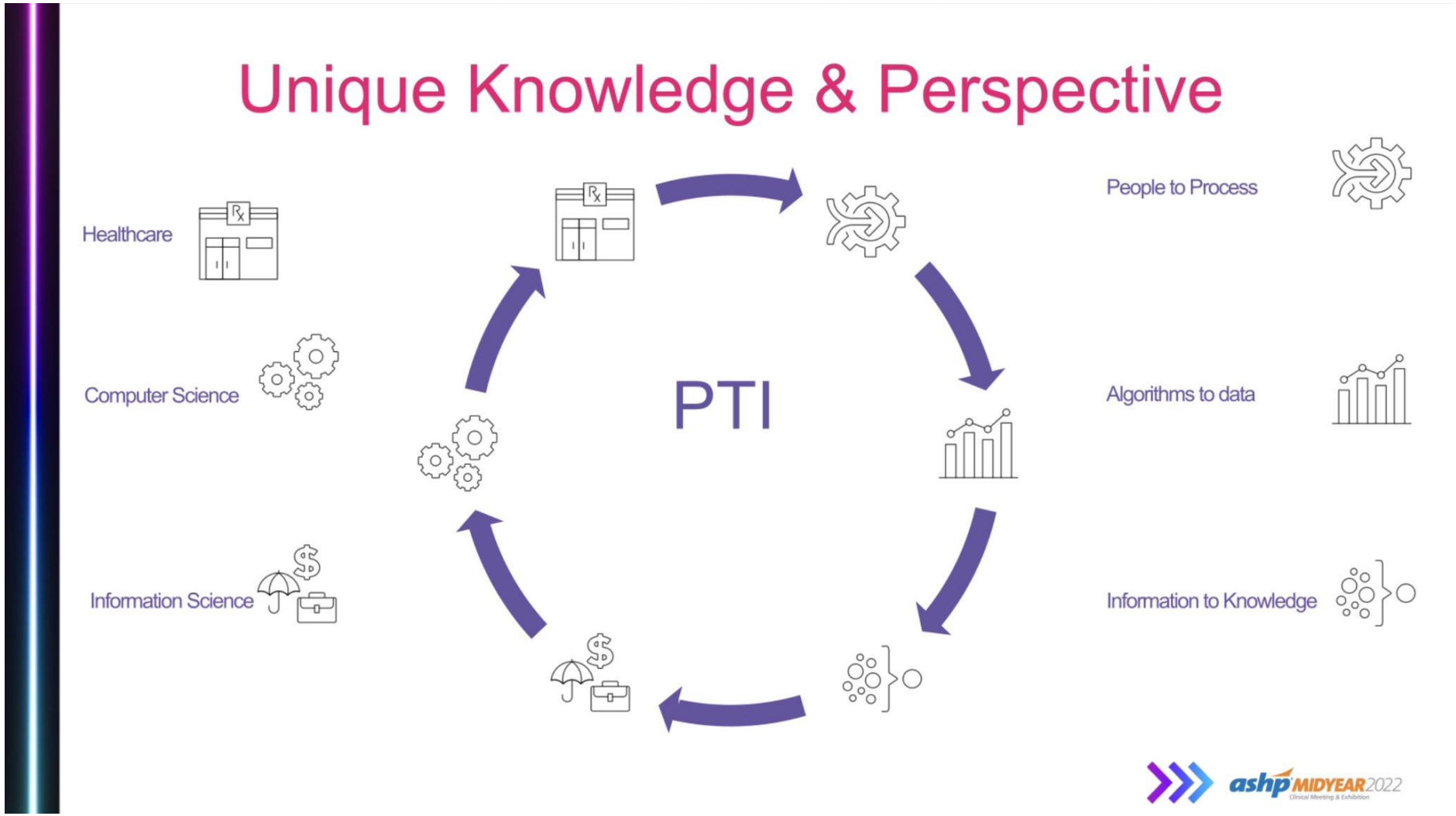
National Library of Medicine

Definition: Pharmacy Technician Informaticists (PTI)

…is a healthcare professional working under the supervision of a registered pharmacist who uses their knowledge to influence and adapt IT systems to improve the effectiveness & efficiency of health systems & the medication use process.

National Library of Medicine

OTROS


Unique Knowledge & Perspective
Healthcare
Computer Science
Information Science
PTI
People to Process
Algorithms to data
Information to Knowledge
ashp MIDYEAR 2022

OTROS

Skills that make PTI uniquely qualified

- Pharmacy Operations
- Technical Knowledge
- Medication Use Workflow
- Medical Vocabulary
- Medication Safety
- Pharmacy Automation
- Database Maintenance
- Regulatory Requirements

OTROS

Emilio Monte
@emiliomonteb

Aprendiendo sobre la figura del técnico en farmacia informático (PTI). ¿Veremos esta figura en España algún día?
#ASHP22 #sefhmidyear2022

Key Takeaways

1) **TECHNICIANS + PHARMACISTS = DREAM TEAM**
PTIs and informatics pharmacists are complementary to each other.
2) **TECHNICIANS ARE PRIME FOR ADVANCED ROLES**
Pharmacy technicians have considerable pharmacy operations knowledge and experience which are well suited for advanced roles in informatics.
3) **JUSTIFICATION AND IMPACT**
It is important to think about how you frame the need for these roles. The greater the impact you can show PTIs having on other departments/service lines, the more buy in you will generate.

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Gracias

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