


# Pharmacy, Patients and Peeps

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**Objectives:**

1. Describe an outpatient/community pharmacy-based patient care delivery model.
2. Explain how a pharmacy-based patient care model can engage in population health.



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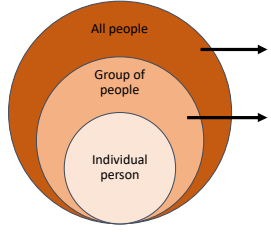
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### Population Health vs. Public Health



**Public health** deals with the health of the **general public**

**Population health** deals with the health of a group of people that share **at least one commonality**



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### What Do We Mean When We Say Population Health?

**Older definition:** “the health outcomes of a group of individuals including the distribution of such outcomes within the group.”<sup>1</sup>

**Newer definition:** “measuring and optimizing the health of groups and in so doing embraces the full range of determinants of health, including health care delivery.”<sup>2</sup>

1. Kindig D and Stoddard G. What is Population Health? Am J Public Health. March 2003; 93(3): 380-3.  
2. Gourevitch Marc. Population Health and the Academic Medical Center: The Time is Right. Academic Medicine. April 2014; 89(4): 544-549.

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### What Are the Key Words and Process in Population Health Management?

Newer definition: “measuring and optimizing” the health of groups and in so doing embraces the full range of determinants of health, including “health care delivery.”<sup>2</sup>

Key words:

- Groups
- Determinants of Health
- Health care delivery
- Measuring and optimizing

Key words → Process

1. Identify a population
2. Identify a problem
3. Identify a practical intervention/care
4. Measure & optimize **outcomes**

This process leads to Population Health Management through Population Based Care

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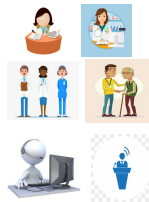
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### Identify a Practical Intervention/Care

Population Based Care is usually<sup>3</sup>

- Collaborative, connective, creative
- Interdisciplinary and trans-disciplinary
- Cross-sector, cross-system
- Civic: local, regional, national
- Global
- Digital



3. Association of schools & programs of public health Population Health Initiative Overview February 2018

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**PHM Strives to Optimize Care & Outcomes**

IT Collaboration is critical.  
PHM is data driven, Usually this data comes from multiple sources

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**Health Information Technology**

Regional, state, national or global level data bases  
System level data bases  
Intervention level Data bases, Decision support tools  
Health hubs monitoring devices  
Personal devices, phones, PCs etc.

Plan Do  
Act Study

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**Cleveland Clinic Pharmacy Population Health Management (CCPPHM) Summit May 2017**

**Definition:**  
"The active process of strategically utilizing health determinant data for a defined cohort to design, coordinate, and deliver high-quality, cost-effective, patient-centered care across the continuum, through optimizing communication, collaboration, and utilization of available resources with the goal of creating and sustaining health!"

**Roles for Pharmacists:**  
 + Preventative Care + Adherence management + Medication management + Disease State Management + Care Coordination + team based-care + innovative care models and delivery + Data analytics and Informatics

1. Hornbeld PA, Magge CE and Hoehn N. Population health management in a small health system: impact of controlled substance stewardship in a patient-centered medical home. Am J Health-Syst Pharm. 2017; 74:1468-75.

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Polling Question

The first step of a population health care model is to identify and define the intervention or care. True or False.

- A. True
- B. False



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**History of Pharmacists in Prevention - as Immunizers**

First organized group was 50 pharmacists in Seattle, Washington in late 1994.

Now all 50 states allow pharmacists to administer immunizations, but laws vary. There are 3 things to consider:

1. Which vaccines can be administered (all FDA, CDC/ACIP-recommended, specific list)
2. Who prescribes them (Medical Provider/Protocol/Pharmacist independently)
3. Which patients (age limits)



<https://www.pharmacytimes.com/view/the-future-of-vaccinations-0110>  
<https://mjsa.us/resources/pharmacist-authority-to-immunize/>

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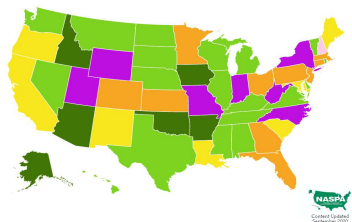

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**Pharmacist Vaccination Authority**

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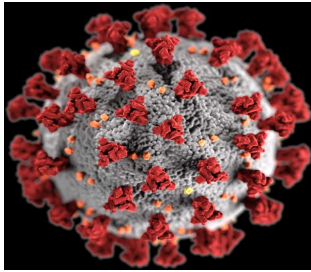
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Then this happened...is happening...



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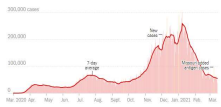
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It happened...is happening there & everywhere

### Coronavirus in the U.S.: Latest Map and Case Count

Updated March 15, 2022, 8:48 AM, E.T.  
Last in Spanish



TOTAL RECOVERED	28,442,914	14,661,144	
Cases	29.4 million*	38,034	-19%
Deaths	534,476	572	-31%
Hospitalized		43,254	-23%



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This COVID story and data changed who, what, why, where and how of care, delivery and interventions, and outcomes. In many ways the Population Health Management piece of this story is just starting. COVID shocked Population Health Management from nominal disease prevention and management to shocking proportions of death prevention and population care & management

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**CDC says...**

The Federal Retail Pharmacy Program for COVID-19 Vaccination is a **collaboration between the federal government, states and territories, and 21 national pharmacy partners and independent pharmacy networks** to increase access to COVID-19 vaccination across the United States. This program is one component of the Federal government's strategy to expand access to vaccines for the American public.

Pharmacists are **highly trusted and trained healthcare providers who have direct access to and knowledge of their patient populations**. Pharmacists are trained to counsel patients, administer vaccine, and provide vaccine education, and pharmacies are readily accessible in communities – with most Americans living within five miles of a pharmacy. Recognizing this, the federal government made them a key part of its COVID-19 vaccination strategy.

<https://www.hhs.gov/ncid/covid-19/retail-pharmacy-program/index.html>

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**CDC is also saying about pharmacists...**

trained  
market saturation  
supply  
trusted  
equitable access  
most Americans live within five miles of a pharmacy  
demand  
fair access

As of March 17, more than 234.9 million doses have been administered and reported by retail pharmacies across programs in the US, which includes 8 million doses administered onsite to long-term care facilities in the early days of the vaccination program.

As of March 15th, 2021, National average payment for COVID vaccine administration increased from \$28 to \$40 for single dose vaccines and \$45 to \$80 for 2 dose vaccines –

<https://www.hhs.gov/ncid/covid-19/retail-pharmacy-program/index.html>

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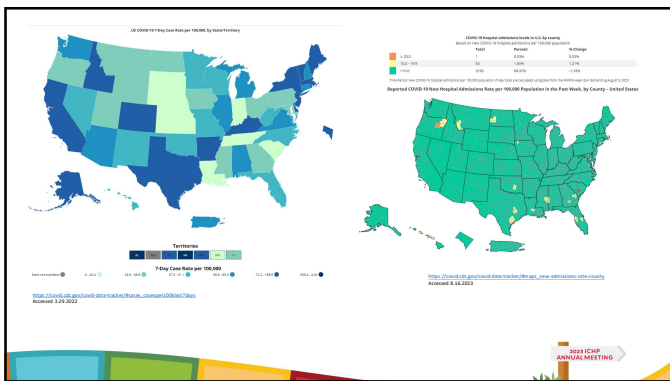
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### Preventative Care – Pharmacy Patients & Peeps

- Identify appropriate vaccines and appropriate patients in your pharmacy.
- Educate patients about benefits and dispel myths/concerns about vaccines.
- Safely administer vaccines to patients via subcutaneous, intramuscular, intranasal, and intradermal routes.
- Create a sustainable immunization service
- Partner with stakeholders and create a presence as an immunization center in your neighborhood.

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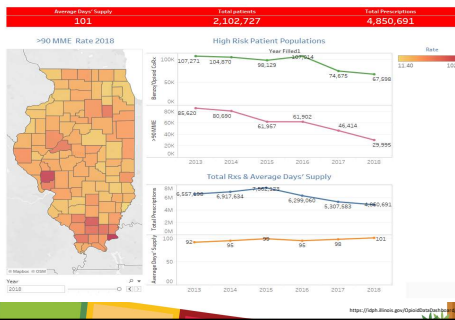
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### Illinois Opioid Dashboard



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### Opioid Care – Pharmacy Patients & Peeps

- Safe prescribing – What type of opioid rxs are your patients on – start low & go slow. If not, what can we do?
- Risk stratifying – What kind of risk are you seeing 50 MME/90 MME
- Risk mitigation – death prevention: Side effect counseling, access to Naloxone
- Referral to additional care/community resources

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### Identify a Population & Problem...



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### Measure Outcomes

<p>HTN Pts</p>  	<p>Diabetes Pts</p>  	<p>Time to goal</p>  <p>Time at goal</p>
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### Examples of Population Health Services at UI Health

- Pharmacy population
- Pharmacy based MTM population
- Post discharge care calls
- Post discharge care coordination



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Intervention	Anticipated Outcomes
<b>Prevention</b>	
Medication monitoring	Provide appropriate preventive medications Address medication access issues in the face of pandemic restrictions
Patient education	Educate patients about preventing coronavirus disease 2019 (COVID-19) infection and symptoms of the disease Provide education on over-the-counter medications Increase patient self-efficacy and reduce adverse outcomes from medications
Vaccinations	Reduce novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission when a vaccine becomes available Prevent outbreaks of vaccine-preventable diseases
Point-of-care testing	Increase access to COVID-19 testing and reduce transmission by early detection and quarantine of detected individuals
<b>Management</b>	
Medication monitoring	Increase treatment success
Patient education	Educate patients about COVID-19 disease Increase patient self-efficacy and reduce adverse outcomes from medications
Medication therapy review	Optimize patient medication adherence and quality of life
Disease self-care and support	Ensure access when medical facilities are not accepting patients Empower patients, increase pharmacist role in multidisciplinary team, and improve population health
Point-of-care testing	Provide real-time point of care screening results for chronic disease management

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Based on: Barr, S., Baskin, E., Kivler, T. (2020). The Role of the Pharmacist in COVID-19 Management. *Journal of Clinical Pharmacy and Therapeutics*, 45(1), 1-10. doi:10.1111/jcpt.12431



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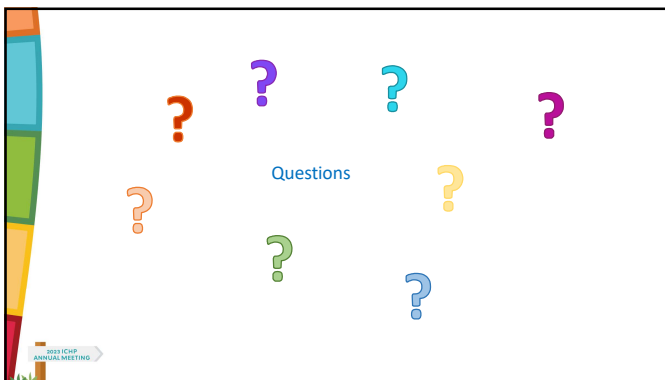
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Questions



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