

Imagine the possibilities

POSTMIDYEAR

A

S

H

P

14 FEBRUARY
2024

Organiza:



Con la colaboración de:





PERSPECTIVA DE LA PROFESIÓN

Organiza:

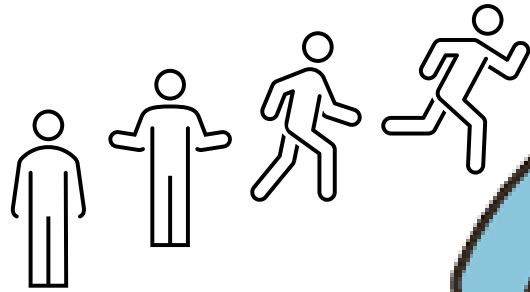


Cecilia Martínez Fernández-Llamazares
Jordi Nicolas Pico

Con la colaboración de:

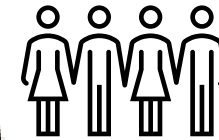
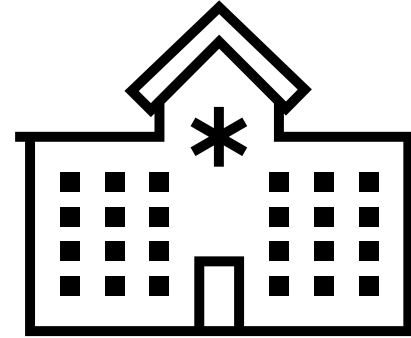


PERSPECTIVA DE LA PROFESIÓN



ASPECTOS QUE EL SISTEMA NECESITA
RESPECTO DE SUS PROFESIONALES

ADVOCACY
CONVIERTE IDEAS EN
RESULTADOS



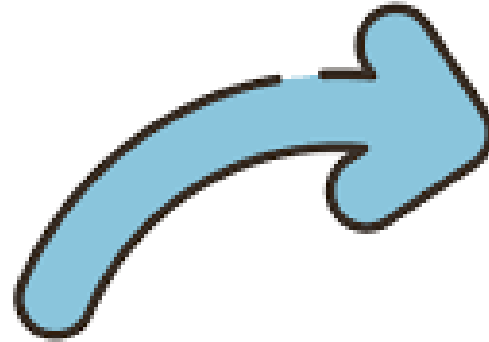
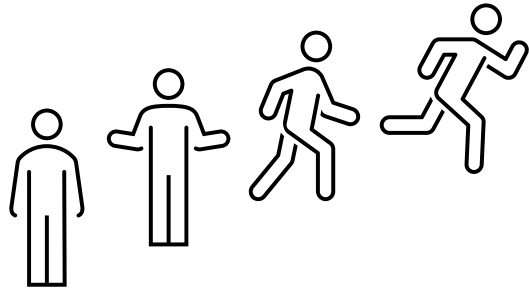
MAKING THE VALUE
VISIBLE

ANÁLISIS DE TENDENCIAS: ASHP FORECAST



NIVEL DE AVANCE "ASHP ANNUAL SURVEY"
OBJETIVOS 2030

PERSPECTIVA DE LA PROFESIÓN



CAMBIO DE PARADIGMA

**LO QUE DEBEN APRENDER LOS
PROFESIONALES**

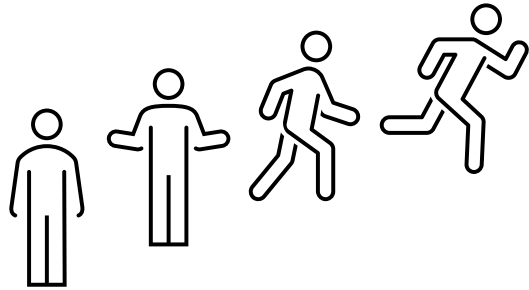
**ASPECTOS QUE EL SISTEMA NECESITA
RESPECTO DE SUS PROFESIONALES**

Past – What you know or can do

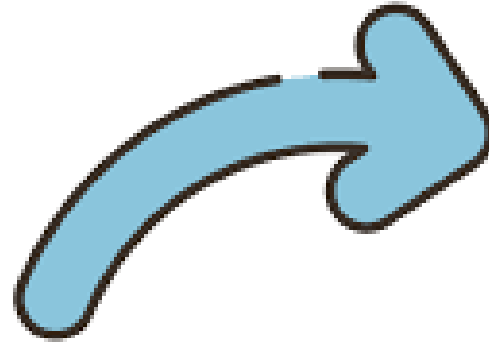
- Basic science knowledge
- Disease state knowledge
- Drug knowledge
- Counseling skills
- Physical assessment skills
- Point of care skills

CREATING A ROADMAP FOR SUCCESS

PERSPECTIVA DE LA PROFESIÓN



ASPECTOS QUE EL SISTEMA NECESITA
RESPECTO DE SUS PROFESIONALES



CAMBIOS EN SISTEMA DE FORMACIÓN

Learning become more “active” & “personalized”

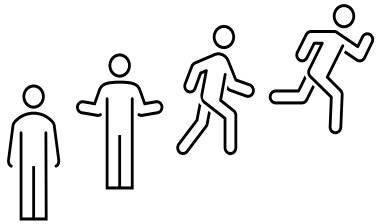
Teaching becoming more “relational” vs. “didactic”

Past – How they learn?

- Didactic delivery of content
- Memorization of content
- Recall assessments
- Limited repetition
- Limited integration

CREATING A ROADMAP FOR SUCCESS

PERSPECTIVA DE LA PROFESIÓN



RECOMENDACIONES GENERALES

Find Mentor(s) - PEOPLE

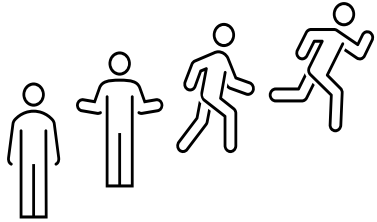
- These individuals will help shape your career
- They can provide a perspective you may not see
 - Unconscious Incompetent - “You don’t know what you don’t know”
- They can provide insight into professional, personal, and social life
- You may have multiple mentors

Networking Mission – PEOPLE

- Interaction / Engagement with others
 - Doesn’t always have to be professional
 - Better to also engage in relaxed, fun environments
- Great way to find your mentors
- One relationship/connection may lead to another
 - Domino effect
- Opens doors to opportunities
- Some truth to “It’s all about who you know”
- Must put yourself in these positions, not rely on others

CREATING A ROADMAP FOR SUCCESS

PERSPECTIVA DE LA PROFESIÓN



RECOMENDACIONES GENERALES

Take Risks / Willing to Fail

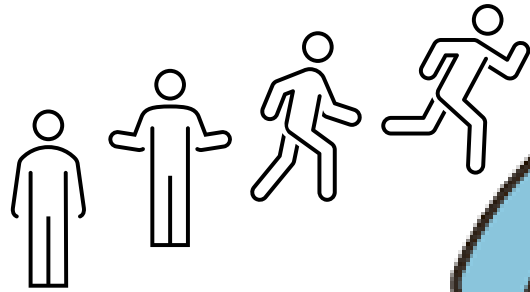
- Don't avoid challenges for fear of failure or for what others may think of you
- Need to take calculated risks
 - **Example:** (Crab – 9.5 story vs. AACP Speaker-elect)
- Need to accept failure will happen
 - Can be productive IF you choose to learn from it

Work-Life Relationship

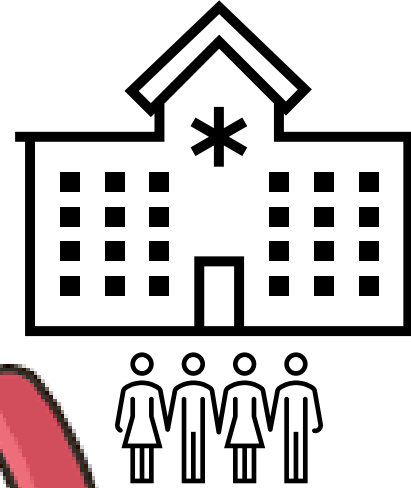
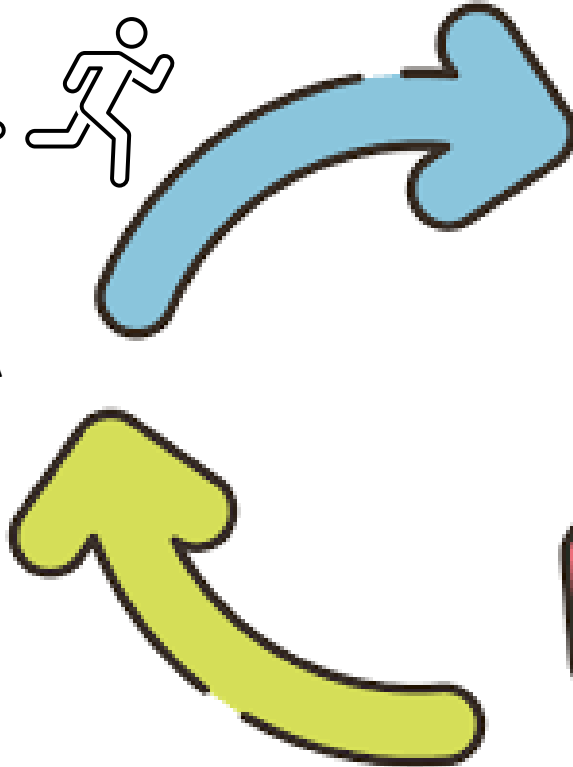
- Work-Life Balance
 - Don't say yes to everything
 - Remember what really matters
 - Not realistic, but worth effort to strive for
- Work-Life Integration
 - Goal isn't to equalize components of your life, but rather find meaningful ways to integrate them
- Living Life Off-Balance
 - Go out of comfort zone to try new things
 - If stationary...no movement, no growth, can limit life

CREATING A ROADMAP FOR SUCCESS

PERSPECTIVA DE LA PROFESIÓN



ASPECTOS QUE EL SISTEMA NECESITA
RESPECTO DE SUS PROFESIONALES



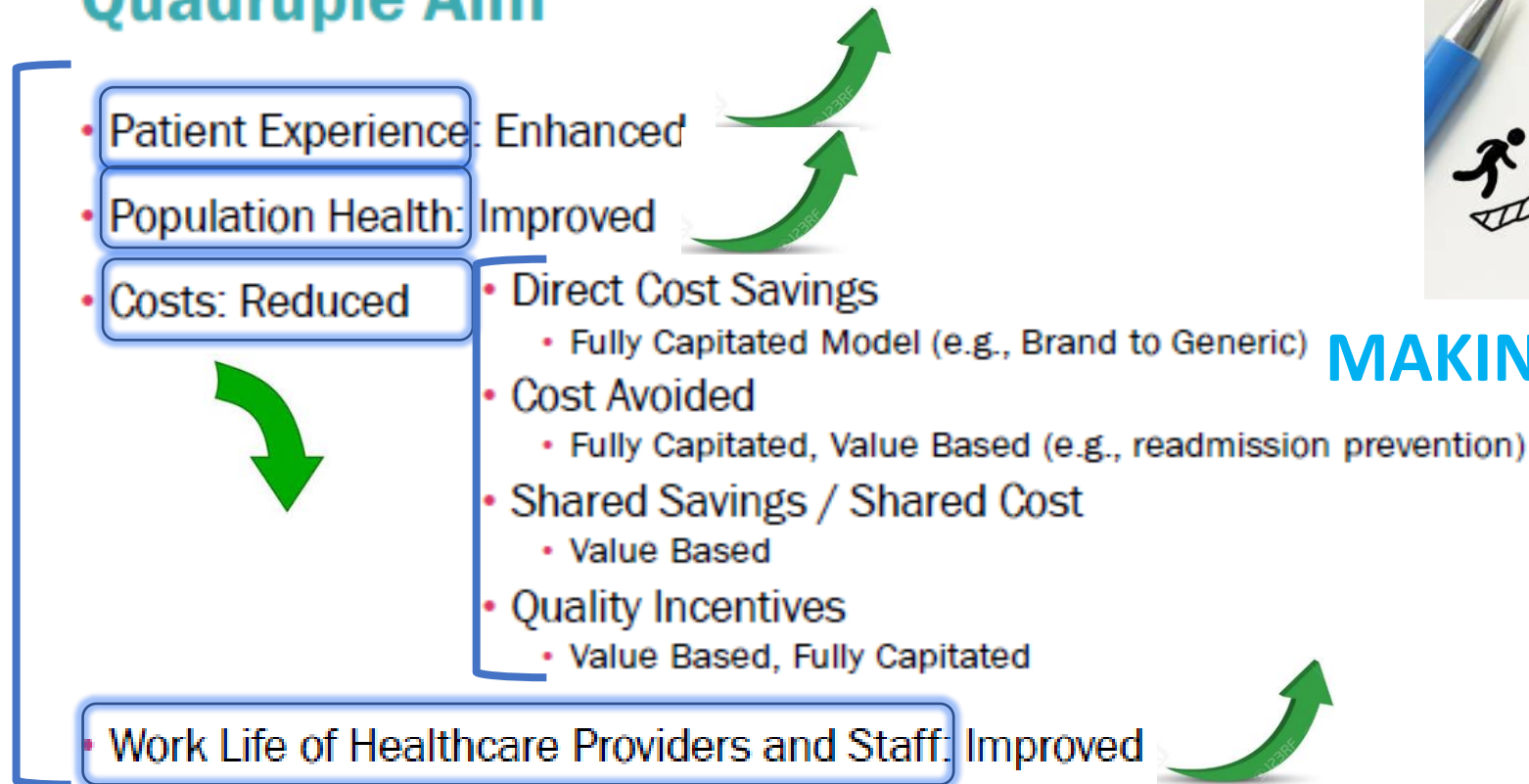
MAKING THE VALUE VISIBLE

El SFH, como equipo, debe llevar a cabo el mejor desempeño de sus labores, pero además resaltar la importancia de las mismas

PERSPECTIVA DE LA PROFESIÓN

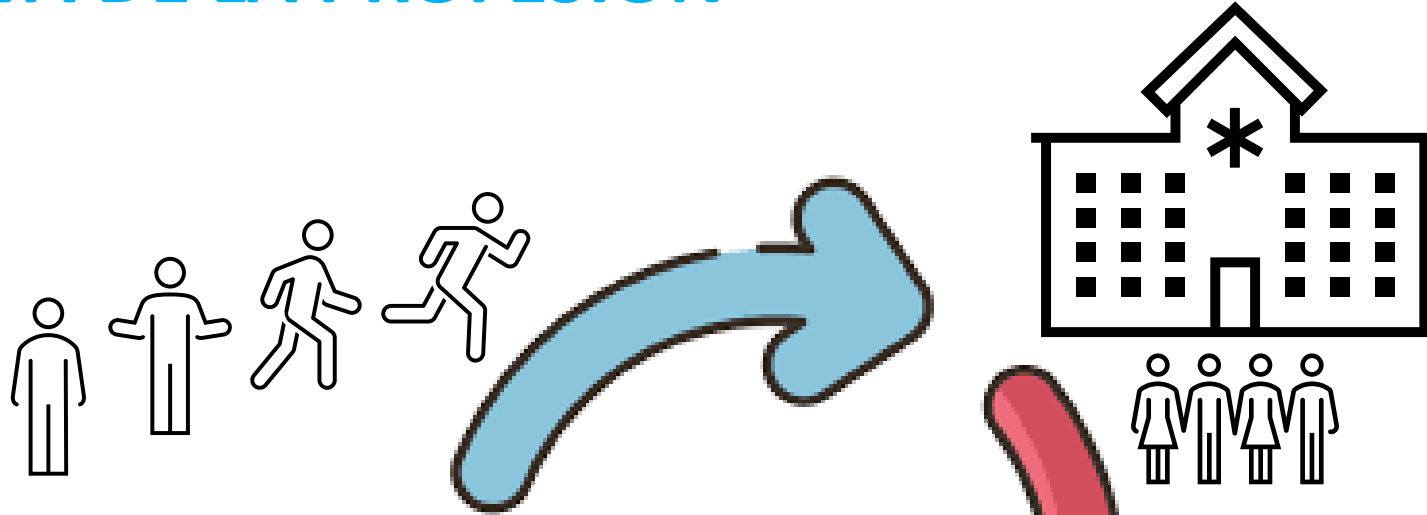


Quadruple Aim



MAKING THE VALUE VISIBLE

PERSPECTIVA DE LA PROFESIÓN



ANÁLISIS DE TENDENCIAS: ASHP FORECAST



**NIVEL DE AVANCE “ASHP ANNUAL SURVEY”
OBJETIVOS 2030**



PERSPECTIVA DE LA PROFESIÓN

ANALISIS DE TENDENCIAS - FORECAST



Pharmacy Forecast 2024: Trends That Will Shape Your Future

Forecast 2024 Domains & Chapter Authors

Public Health Priorities

Marie Chisolm-Burns and Pam Schweitzer

Disease and Treatment Innovations

Eric Tichy and Inmaculada Hernandez

Responding to the Mental Health Crisis

Todd Nesbit and Tanya Fabian

Workforce

Christopher Scott and Christy Norman

Achieving Care Equity

Fran Cunningham and Michael Fine

Artificial Intelligence & Data Integration

Scott Nelson and Yaa Kumah-Crystal

• 1 2 3 4 5 6 7 8 9 10 11 12

THE POSSIBILITIES



Responding to the Mental Health Crisis: Preparedness



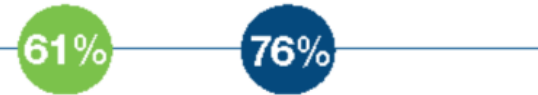
2—50% of health systems will expand screening, prevention, and treatment services to address adolescent substance use disorder.



Achieving Care Equity: Preparedness



9—Value-based payer contracts will include incentives when health systems demonstrate care equity (e.g., similar outcomes of care regardless of race, gender, or location).



Disease and Treatment Innovations: Preparedness



7—Formulary and policy decisions for ultra-high cost (e.g., rare and orphan drugs, gene therapy, CAR-T) will be decided by payer or service line stakeholders, and as a result, will weaken the scope of authority of the health-system Pharmacy and Therapeutics Committee.

56%

78%

Workforce: Preparedness



5—As a result of the nursing shortage, 25% of health-systems will have pharmacy personnel assume responsibility for medication administration.



Artificial Intelligence and Data Integration: Preparedness

 PREPARED  LIKELY

11—State boards of pharmacy will develop regulations allowing the use of artificial intelligence or other technology in place of pharmacist order review and verification.

33%

44%



PERSPECTIVA DE LA PROFESIÓN



ASHP 2023 National Survey: A Conversation About the State of Pharmacy Practice

2023 Survey Sample and Responses

	Surveyed <i>n</i>	Respondents <i>n</i>	Response Rate %	Population <i>n</i>
Staffed beds				
<50	353	81	22.9	1769
50-99	202	42	20.8	678
100-199	206	43	20.9	1023
200-299	200	50	25.0	615
300-399	197	31	15.7	371
400-599	201	43	21.4	331
≥600	138	34	24.6	138
All hospitals	1497	324	21.6	4926

PRACTICE ADVANCEMENT INITIATIVE 2030



PAI 2030'S FIVE PRIMARY DOMAINS:



Patient-centered care



Technology and
data science

Pharmacy technician role,
education, and training



Pharmacist role, education,
and training



Leadership in
medication use
and safety

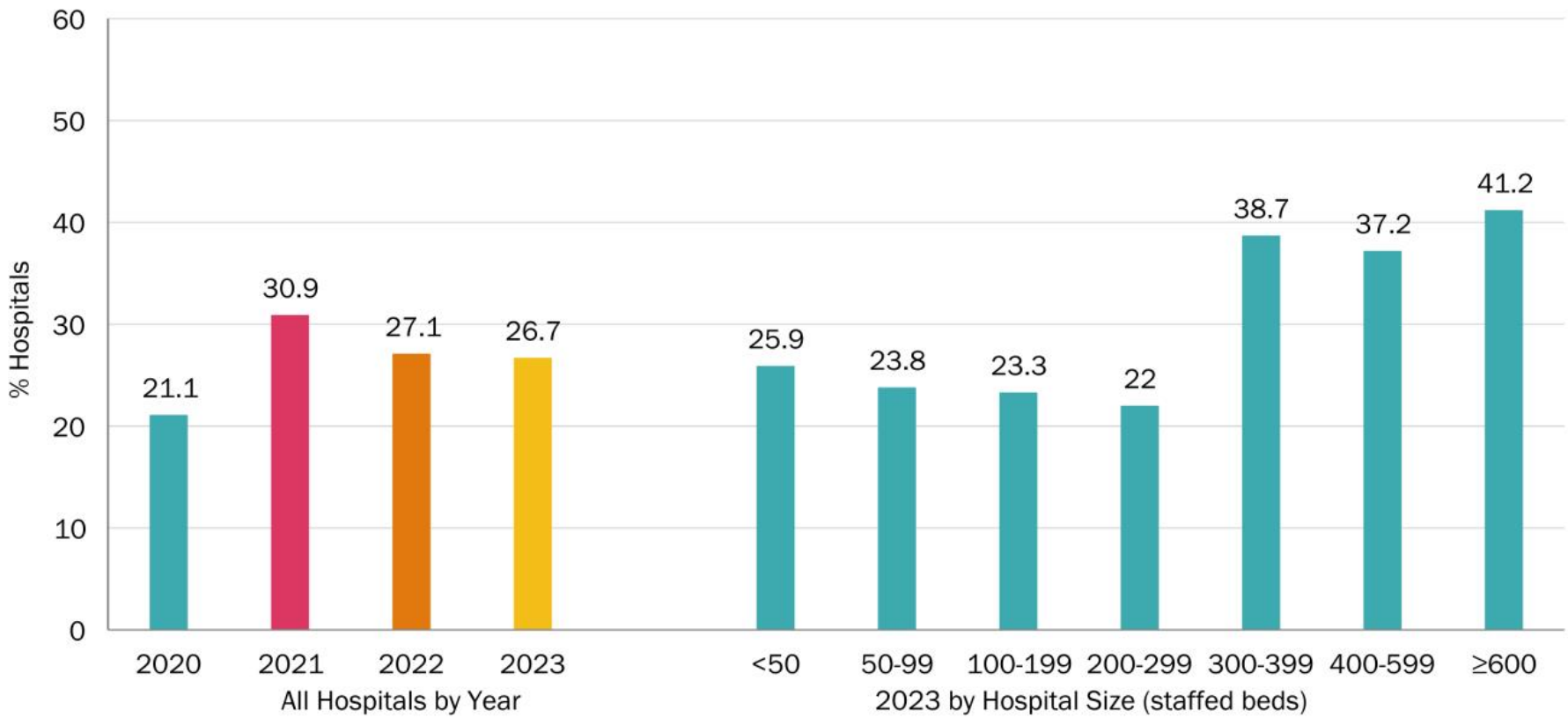


Pharmacists Independently Prescribe



- Optimize medication use and access through pharmacist prescribing
 - *By 2024, increase authority for pharmacists to independently prescribe medications, pursuant to a diagnosis, by 20%*

Pharmacists Independently Prescribe Pursuant to a Diagnosis





Use of Data Analytics

- Leverage and utilize technology to optimize pharmacist provision of care to patients
 - *By 2024, increase by 20% the number of health systems using analytics and technology to reduce the risk of adverse drug events or suboptimal outcomes*

Data Analytics and Technology

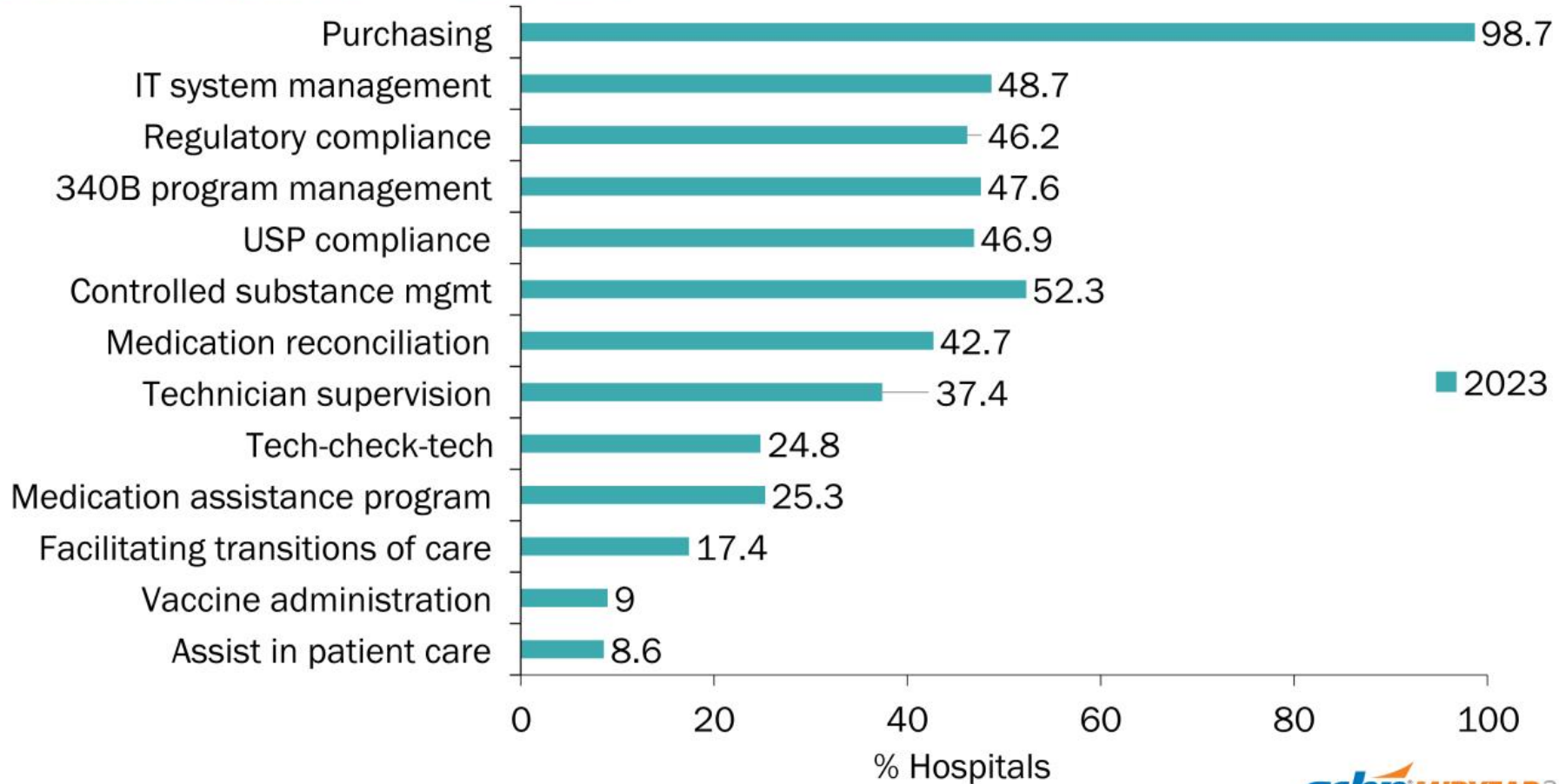
	Basic Analytics (e.g., smart pumps, clinical decision support) (%)	Advanced Analytics (e.g., artificial intelligence, predictive analytics) (%)	Analytics Not Used (%)
Staffed beds			
<50	84.0	1.2	14.8
50-99	83.3	9.5	7.1
100-199	93.0	4.7	2.3
200-299	94.0	4.0	2.0
300-399	83.9	16.1	0.0
400-599	86.0	14.0	0.0
≥600	88.2	11.8	0.0
All hospitals - 2023	87.3	5.7	7.0
All hospitals - 2022	84.7	8.7	6.6
All hospitals - 2021	88.3	4.0	7.8



Pharmacy Technicians

- *Expand the role of pharmacy technicians*
 - Objective: By the end of 2024, increase the number of health systems utilizing pharmacy technicians in advanced roles by 20%

Activities of Pharmacy Technicians – 2023

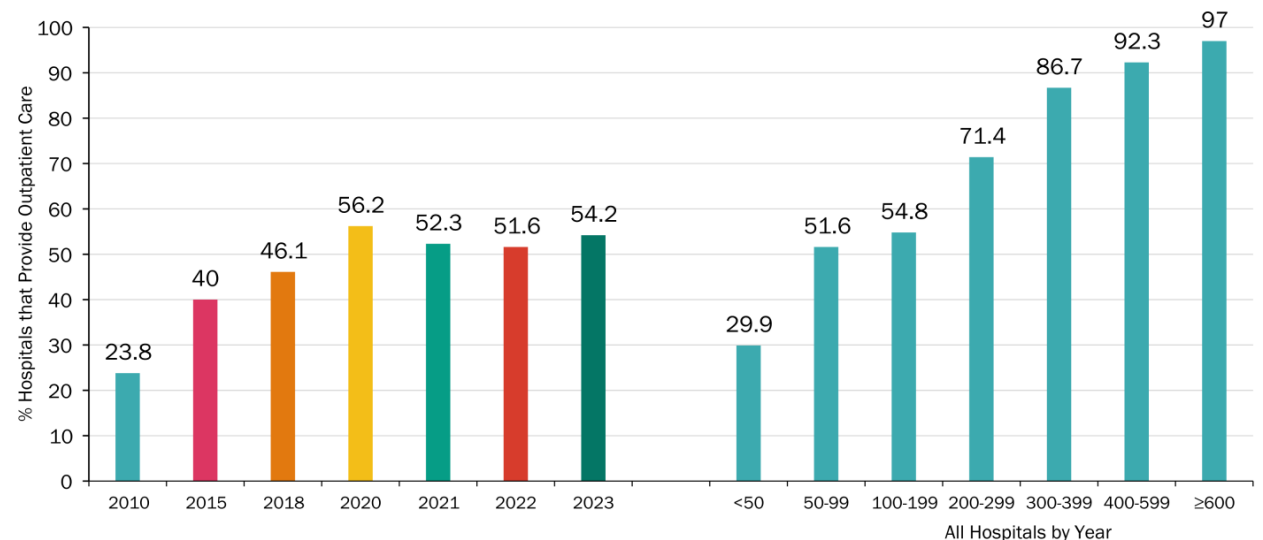


Pharmacists in Ambulatory Clinics



- *Improve patient access to pharmacist services in ambulatory care clinics*
- Objective: By the end of 2024, increase the number of pharmacists in ambulatory care clinics by 20%

Pharmacists in Ambulatory Clinics





Transitions of Care

- *Ensure all patients receive seamless and coordinated pharmacy services at all transitions of care*
 - Objective: By 2024, increase the number of health systems with integrated pharmacy services to coordinate effective patient care transitions by 20%

Pharmacy Services – Level of Integration

	Not at all integrated (%)	Some integration (%)	Mostly Integrated (%)	Seamless Integration (%)
Staffed beds				
<50	29.6	55.6	13.6	1.2
50-99	31.0	59.5	7.1	2.4
100-199	20.9	65.1	14.0	0.0
200-299	28.0	58.0	10.0	4.0
300-399	16.1	67.7	16.1	0.0
400-599	9.3	67.4	20.9	2.3
≥600	11.8	52.9	23.5	11.8
All hospitals – 2023	24.9	60.0	13.3	1.8
All hospitals – 2022	27.9	53.6	16.6	2.0
All hospitals – 2021	34.8	54.5	8.6	2.1
All hospitals – 2020	30.6	55.0	13.8	0.6

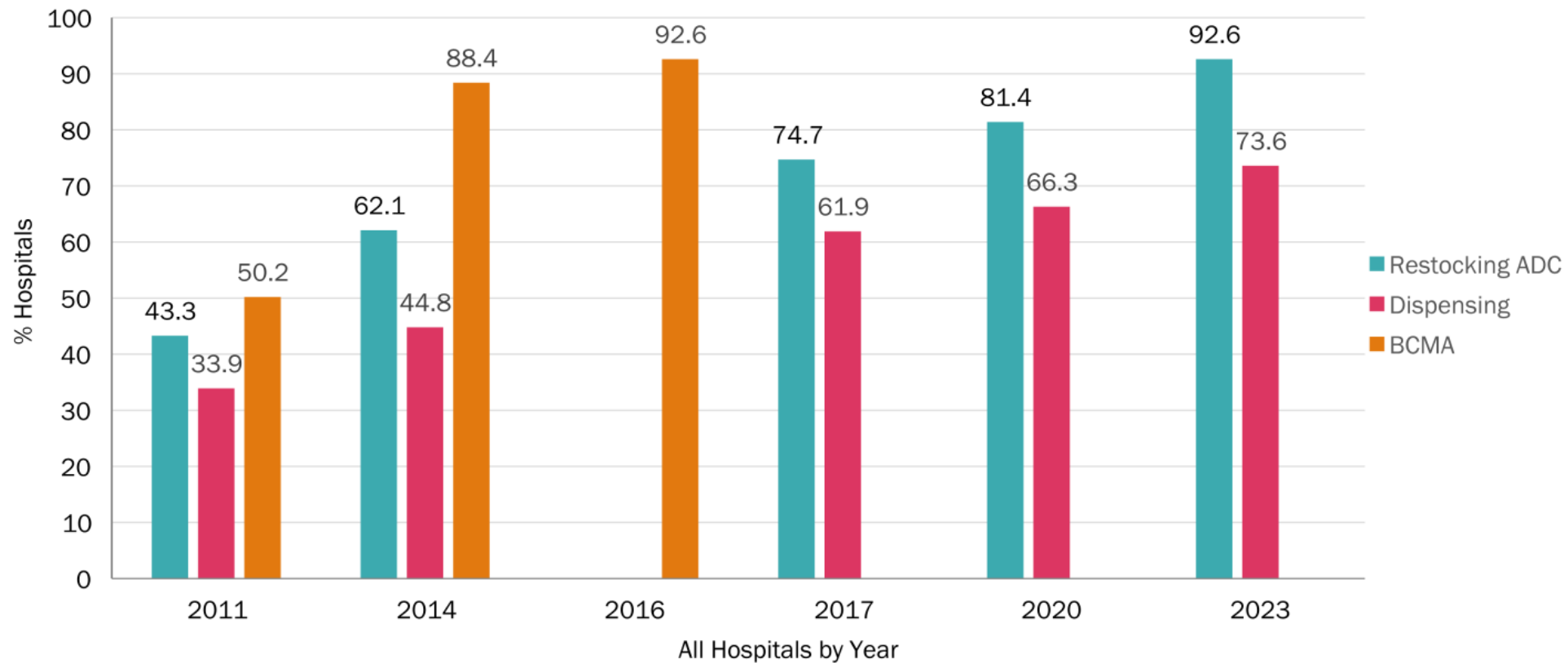


imagine THE POSSIBILITIES

Pharmacy Operations and Technology

Medication Safety

Machine-Readable Coding Comparison



ADC: Automated dispensing cabinet
 BCMA: barcode medication administration

Accessing Medications in ADCs

- Misspelling drug names
- Non-letter characters
 - (searching “kit “)
- Combination drugs
- Failure to enter five characters
 - (searching “epi”)

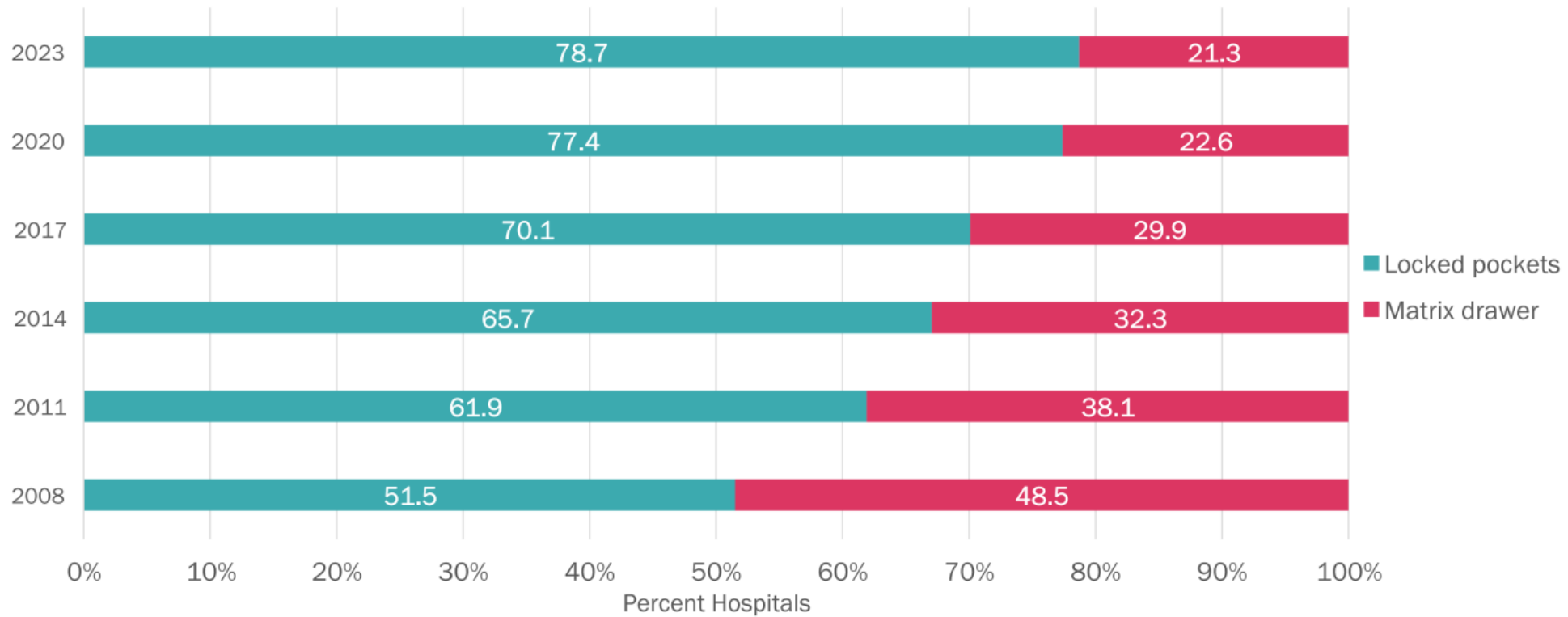
FEATURED ARTICLES

Challenges with Requiring Five Characters During ADC Drug Searches Via Override

October 21, 2021

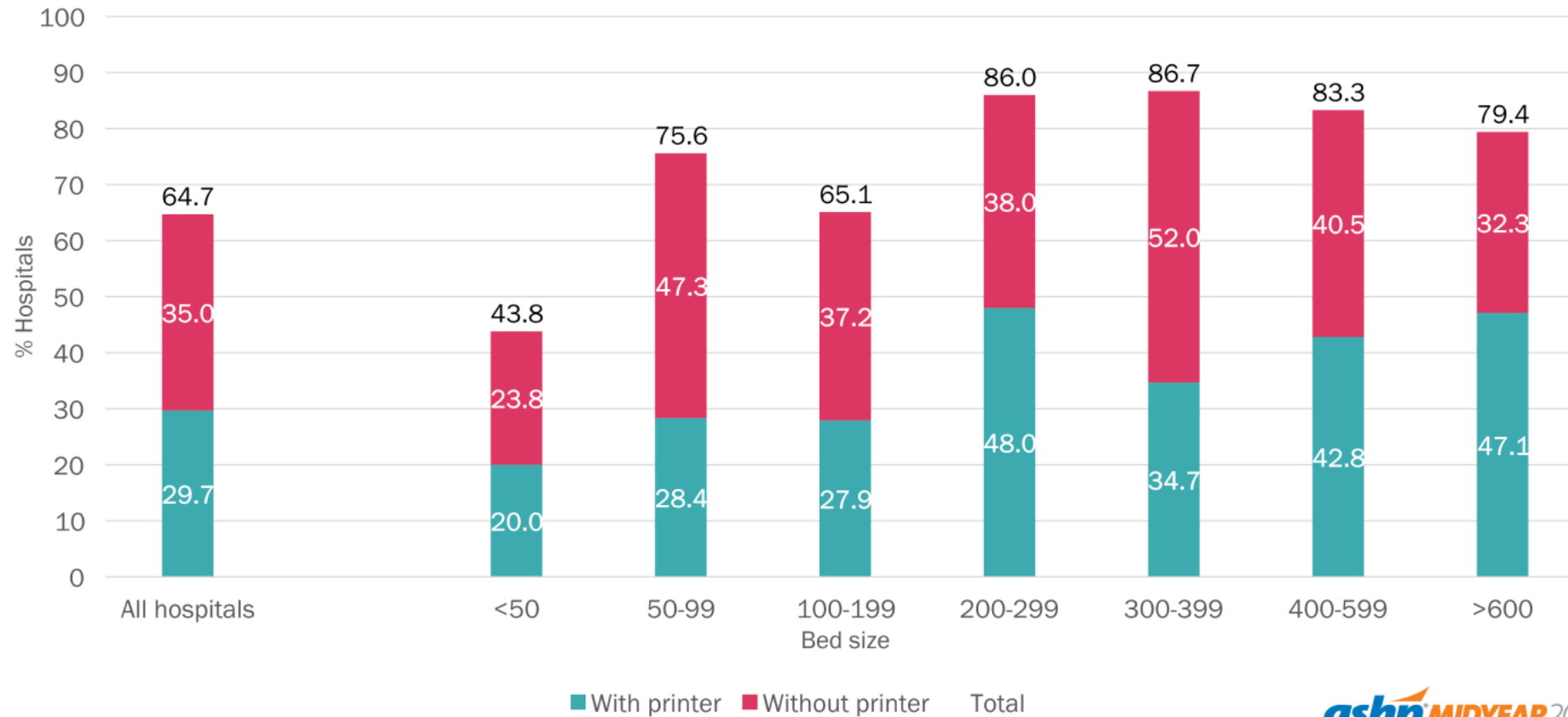
Accessing Medications in ADCs

Predominant configuration



Anesthesia Workstations

Hospital Uses Anesthesia Workstations

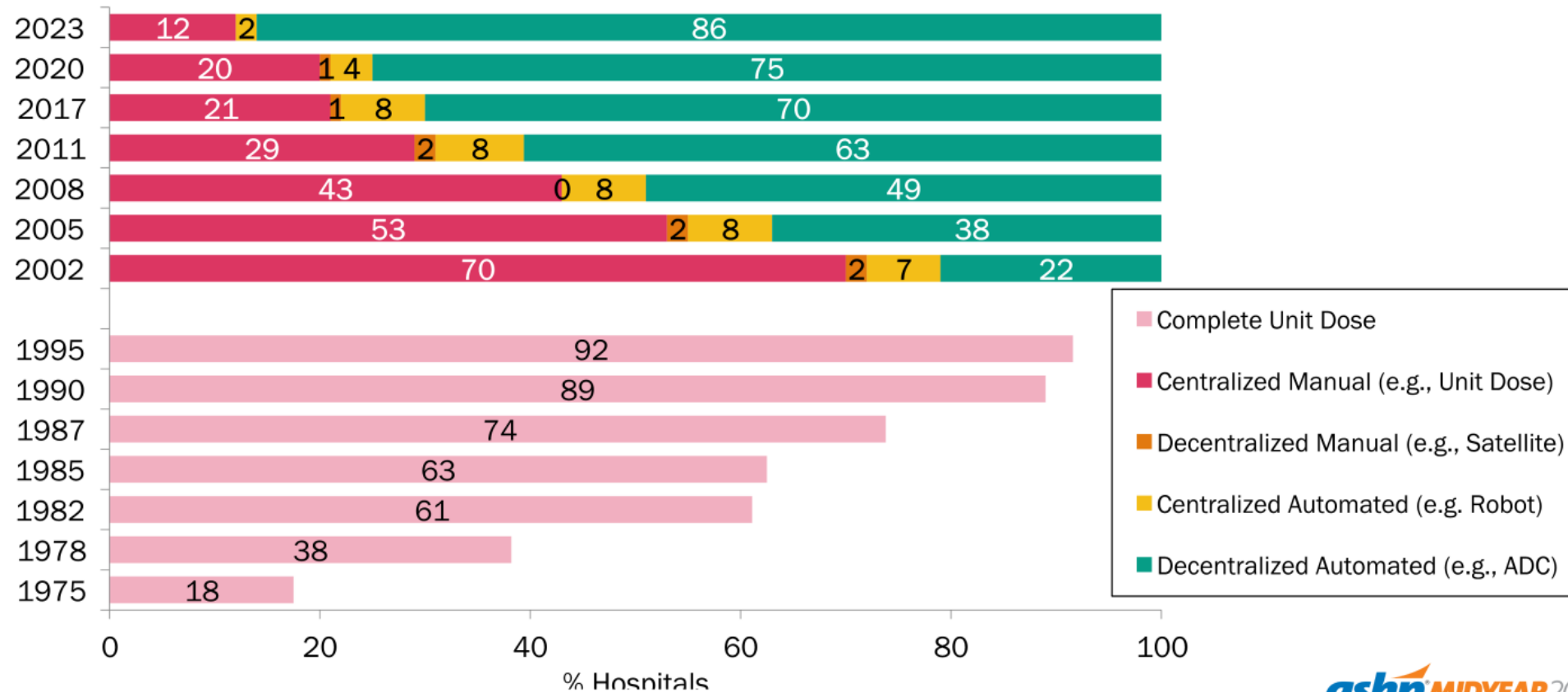




Pharmacy Operations and Technology

Inventory Management and Technology

Evolution of Drug Distribution Systems 1975 - 2023

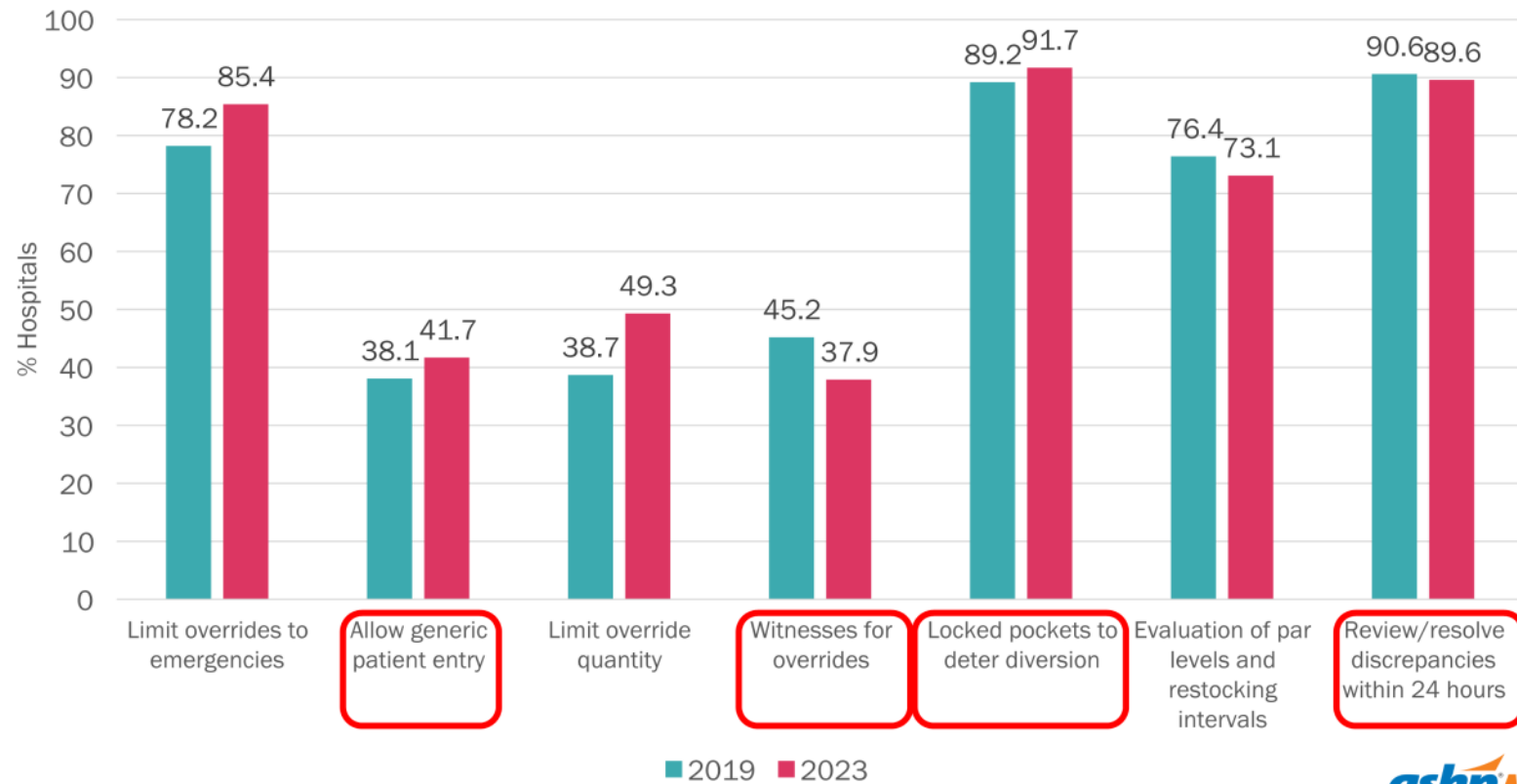


Use of RFID Technology

	Medication Kits or Trays (%)	Medication Location and Delivery Tracking (%)	Contracted Consignment System (%)	Other (%)	Not used (%)
Staffed beds					
<50	1.3	0.0	0.0	1.3	97.5
50-99	7.1	2.4	4.8	2.4	90.5
100-199	18.6	0.0	14.0	0.0	72.1
200-299	30.0	0.0	6.0	2.0	66.0
300-399	36.7	3.3	23.3	3.3	46.7
400-599	52.4	2.4	16.7	2.4	40.5
≥600	61.8	2.9	29.4	2.9	26.5
All hospitals - 2023	17.0	0.8	8.0	1.5	77.7

RFID: Radio frequency identification

ADC Configuration for Controlled Substances



Centralized Shared Services (CSS) Products and services

	All Hospitals (%)
Unit dose repackaging	63.1
Centralized ADC fills	49.9
Clinic medications purchasing / distribution	35.7
Carousel / shelf stock replenishment	32.5
Non-hazardous sterile compounding	27.3
Nonsterile oral liquid repackaging	25.3
Nonsterile compounding	18.8
Controlled substances distribution	16.0
Tray / kit filling	14.4
Hazardous sterile compounding	8.0

PROTECT YOUR PATIENTS

Know your responsibilities under the Drug Supply Chain Security Act

The Drug Supply Chain Security Act (DSCSA) includes requirements that pharmacies must follow to protect patients from receiving harmful drugs, such as counterfeit or other illegitimate drugs.

The DSCSA was enacted in 2013 to further secure our nation's drug supply. It creates a tighter, closed prescription drug distribution system to **prevent** harmful drugs from entering the supply chain, **detect** harmful drugs if they do enter the supply chain, and enable rapid **response** when such drugs are found.

By law, pharmacies are required to:



Confirm the entities you do business with are licensed or registered

To help determine whether trading partners who you do business with (manufacturing, repackagers, wholesale distributors, third-party logistics providers, and pharmacies) are licensed or registered:



Check the registration of manufacturers and repackagers. See FDA's drug establishments current registration site database to confirm registration. You can find this database by searching for DECRS at www.fda.gov.



Check the licensing of wholesale distributors and third-party logistics providers. See FDA's wholesale drug distributor and third-party logistics providers reporting database. You can find this by searching for WDD/3PL database at www.fda.gov.



Check the licensing of pharmacies through the respective state authority.



Receive, store, and provide product tracing documentation

The law requires drugs to be traced as they move through the supply chain, and pharmacies must:

DSCSA Readiness

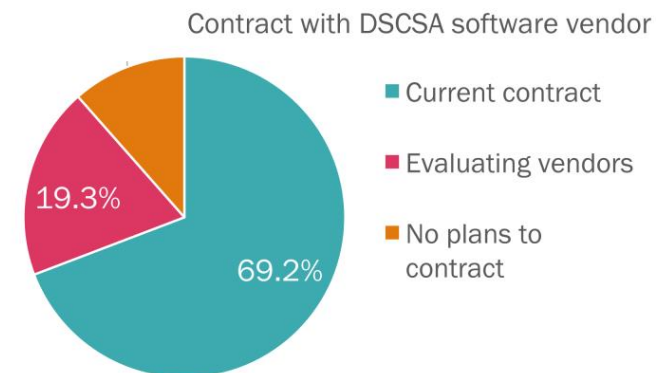
Not planning on complying
0%

Have not started preparation
6.4%

Working on compliance
72.4%

Currently compliant
21.2%

- 8/30/23 FDA announced 1-year stabilization
- Enforcement begins 11/27/2024



DSCSA: Drug Supply Chain Security Act



Pharmacy Operations and Technology

Sterile Medication Preparation Technology

Barcode scanning to verify ingredients

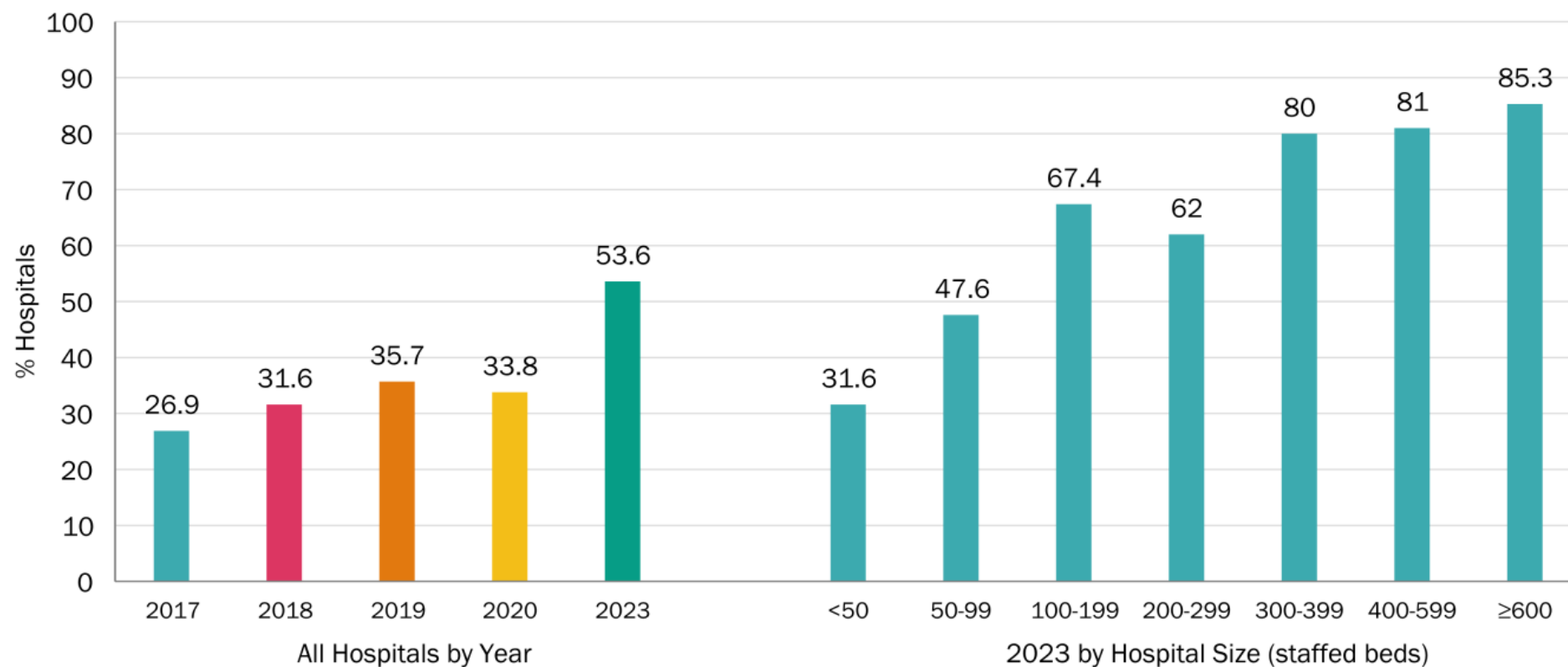
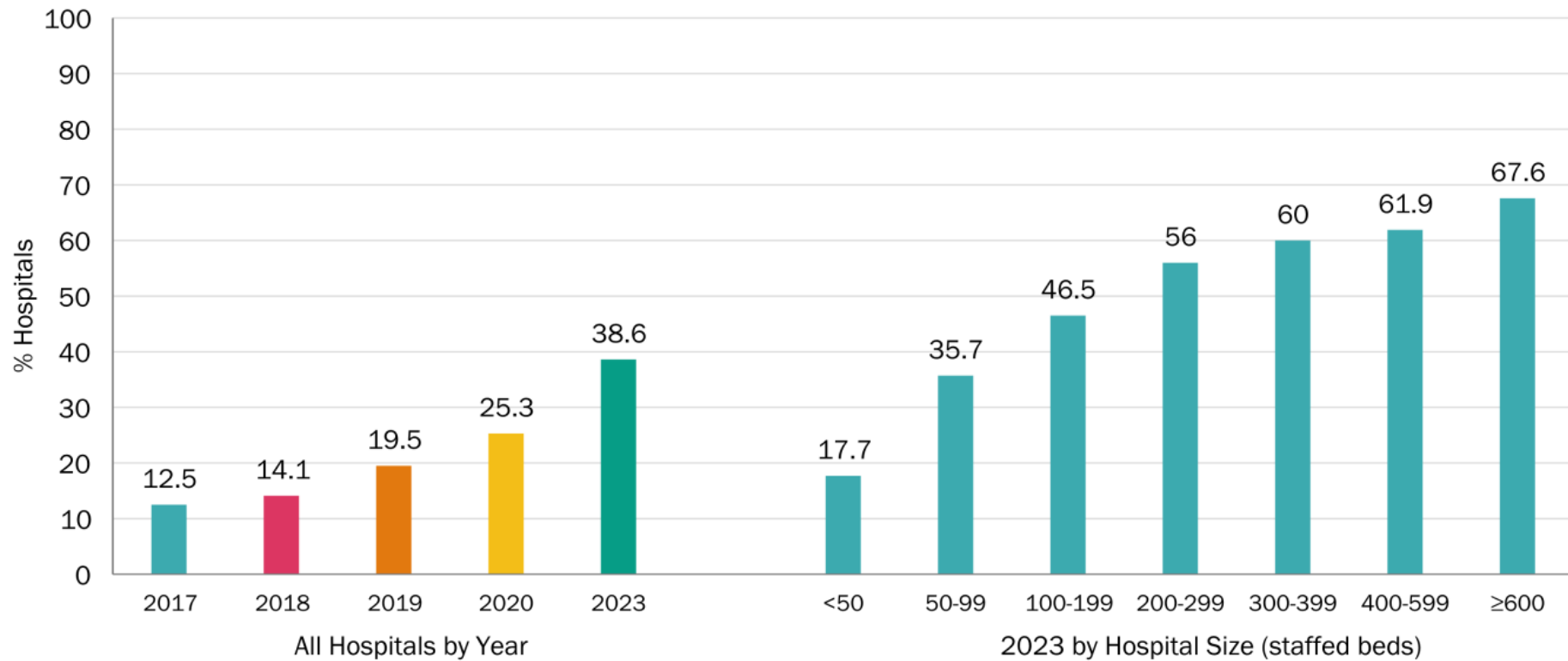
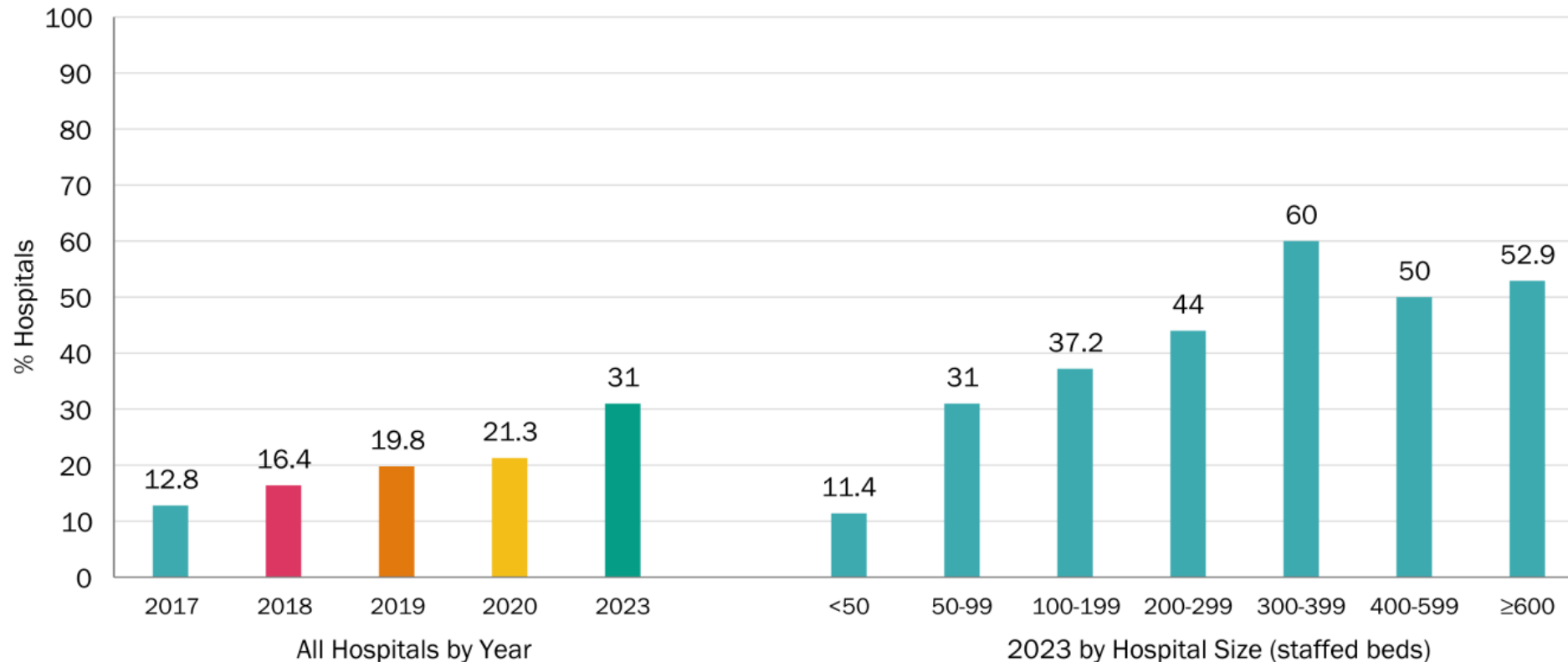


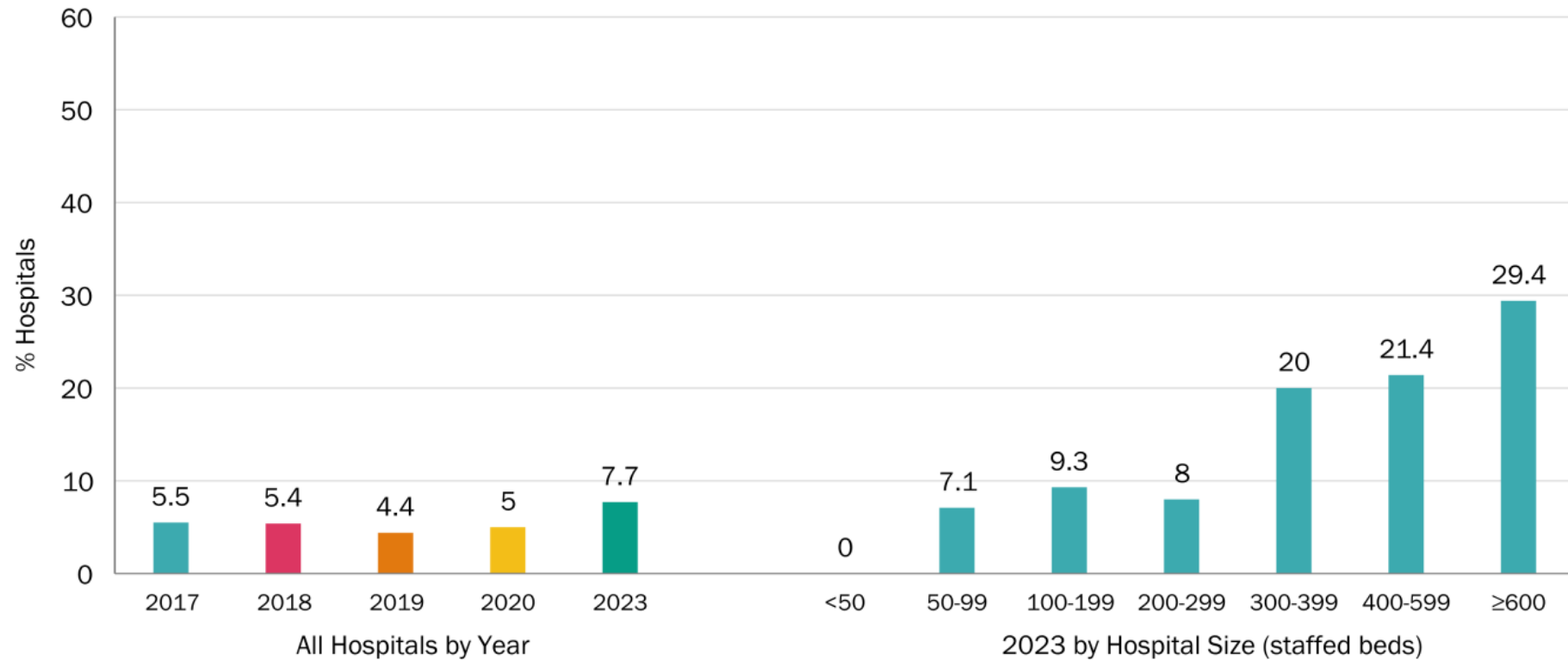
Image capture or video of compounding



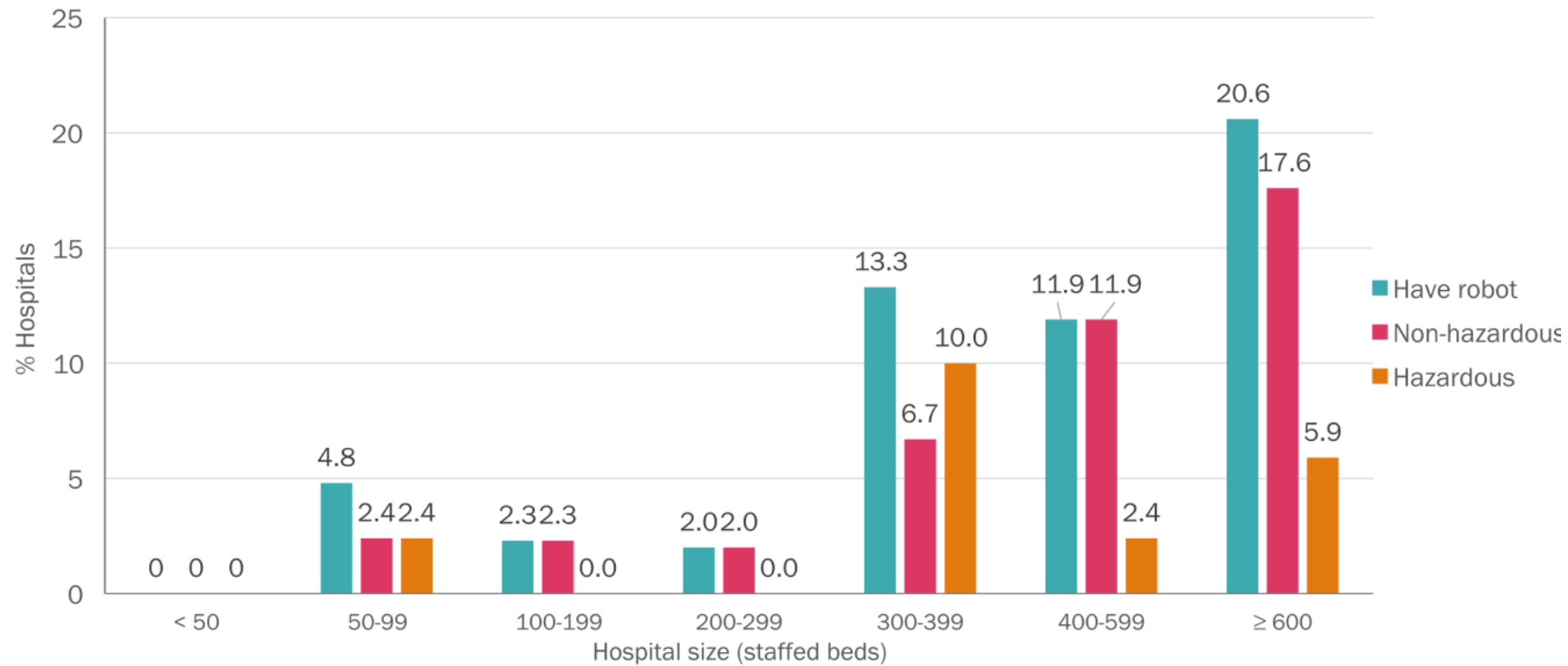
Workflow management software



Gravimetrics to verify dose or volume



Sterile Compounding Robotics



Parenteral Nutrition

	Gravity (%)	Automated compounding device (%)	Commercially available multi-chamber system (%)	Outsourced (%)	Hospital does not administer PN (%)
Staffed beds					
< 50	2.5	0.0	57.5	6.3	33.8
50-99	2.4	7.1	66.7	16.7	7.1
100-199	9.3	9.3	53.5	25.6	2.3
200-299	6.0	22.0	40.0	32.0	0.0
300-399	0.0	43.3	20.0	36.7	0.0
400-599	0.0	47.6	14.3	38.1	0.0
≥ 600	2.9	50.0	5.9	41.2	0.0
All hospitals—2023	4.0	13.5	48.7	20.3	13.6

PN: Parenteral nutrition

Pharmacy Operations and Technology

Autoverification Characteristics

	Select medications, all locations (%)	Select medications, select locations (%)	All medications, select locations (%)	Rules or analytics based on medication and patient (%)
Staffed beds				
< 50	24.5	32.1	67.9	1.9
50-99	21.9	46.9	56.3	12.5
100-199	22.6	54.8	35.5	6.5
200-299	22.5	65.0	32.5	12.5
300-399	16.7	70.8	16.7	25.0
400-599	23.5	67.6	23.5	20.6
≥ 600	34.6	61.5	23.1	23.1
All hospitals—2023	23.1	50.1	45.9	9.7
All hospitals—2019	17.1	50.2	52.9	—
All hospitals—2016	12.0	40.3	58.2	—

Primary Reason for Not Allowing Autoverification

- 44.8% Patient safety concerns
- 19.8% Hospital has not discussed the option
- 17.2% Requirements by law, regulators, accreditors
- 9.5% EHR does not allow
- 8.6% EHR limitations on criteria used for autoverification



Pharmacy Operations and Technology

Pharmacy Workforce

Pharmacist Time Allocation

2018
Current

2018
Future

2023
Current

2023
Future

	2018 Current	2018 Future	2023 Current	2023 Future
Order verification	40.6 %	32.0%	37.0%	30.8%
Clinical responsibilities	25.0%	37.3%	27.0%	35.5%
Drug distribution	18.7%	12.3%	18.3%	14.5%
Administrative	8.2%	8.1%	11.7%	10.9%
Training / teaching	7.1%	9.6%	6.0%	8.3%

Technician Time Allocation

	2018 Current	2018 Future	2023 Current	2023 Future
--	-----------------	----------------	-----------------	----------------

Traditional drug preparation and distribution	77.5%	61.5%	66.0%	57.6%
Non-traditional activities	11.3%	23.0%	11.1%	19.1%
Administrative	7.7%	8.9%	11.6%	12.2%
Order processing / order entry	2.9%	5.8%	11.2%	11.1%

PERSPECTIVA DE LA PROFESIÓN



PERSPECTIVA DE LA PROFESIÓN



CONVIERTE LAS IDEAS EN RESULTADOS

Trasladar e influir en la toma de decisiones sobre temas de interés propio, que dan lugar a cambios normativos que permiten el avance profesional.



Passive, Top-Down Advocacy	Leadership presents updates to members Email blasts to memberships "Get involved!"
Active, Grassroots Advocacy	Letter writing campaigns Post on social media Legislative visits!

PERSPECTIVA DE LA PROFESIÓN

Institutions Impacting Healthcare Policy

	Federal	State
Legislative	<ul style="list-style-type: none"> • United States House of Representatives • United States Senate 	<ul style="list-style-type: none"> • State House of Representatives • State Senate
Regulatory	<ul style="list-style-type: none"> • Food and Drug Administration (FDA) • Drug Enforcement Agency (DEA) • Centers for Medicare and Medicaid Services (CMS) • Centers for Disease Control and Prevention (CDC) • Health Resources and Services Administration (HRSA) 	<ul style="list-style-type: none"> • Board of Pharmacy • Health Department • Bureau of Narcotics and Dangerous Drugs (BNDD) • Board of Medicine • Board of Nursing

- Precios
- Desabastecimientos
- Cartera de servicios
- Hospitalización a domicilio...



CONVIERTE LAS IDEAS EN RESULTADOS

Who are the Stakeholders?

Pharmacists, technicians, students	Board of Pharmacy	ASHP state affiliate	State pharmacy organizations
Non-pharmacist providers and societies (medicine, nursing)	Healthcare facilities, government affairs	Hospital C-suite	State hospital association
Colleges of Pharmacy, students	Patients and patient advocacy orgs	Governor's office	Grassroots members

PERSPECTIVA DE LA PROFESIÓN

POSIBLE?? NECESARIO? OBLIGATORIO!!



PLAN DE ASUNTOS PÚBLICOS

1. Definir estrategia
 1. Interlocutores
 2. Aliados
 3. Los pacientes como advocacy
 4. Cómo impacta presupuestariamente?
2. Definir cronograma
3. HAZ VISIBLES NO, OBVIOS, LOS BENEFICIOS
 1. Reducción costes
 2. Mejora resultados en pacientes
 3. Mejora acceso a pacientes
4. Compara con otros países
5. Trabaja interacción y preguntas
6. COMUNICALO de manera efectiva a TODOS LOS SOCIOS
7. Monitoriza apoyos...

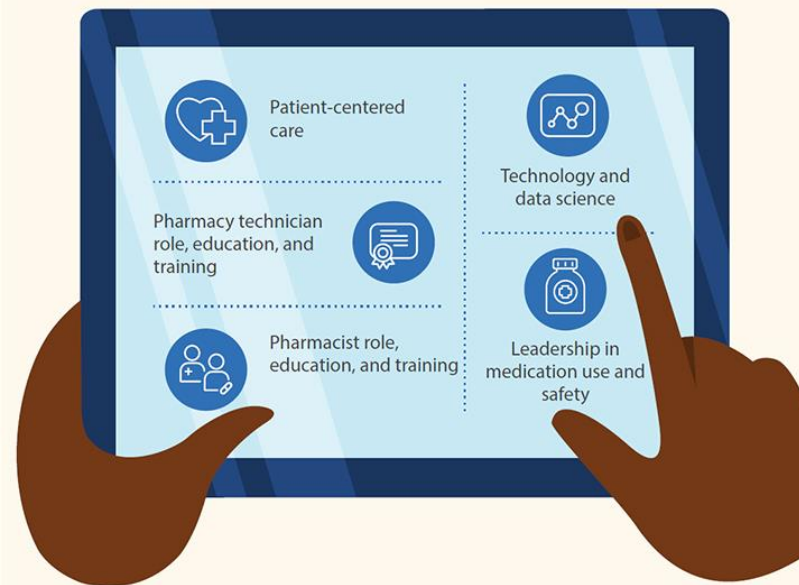


PERSPECTIVA DE LA PROFESIÓN:



ONE VOICE ONE VISION

VISIÓN DE ESTRATEGIA Y AVANCE



PAI SUCCESS STORIES

Recommendations from the original PAI have sparked remarkable practice change in:



CONTINUITY OF CARE
 33% reduction in 30-day hospital readmissions when pharmacists provided comprehensive medication management¹



RESIDENCY TRAINING
 270% increase in residency positions from 2007 to 2019²



MEDICATION REVIEWS
 41% increase in pharmacist completion of comprehensive medication reviews with pharmacy tech in a clinical support role³