SUPPORTING THE INFECTION PREVENTION WORKFORCE

Sarah Smathers, MPH, CIC, FAPIC

System Director, Infection Prevention and Control

Children’s Hospital of Philadelphia

Disclosures

I have no financial disclosure or conflicts of interest with the following presented material.

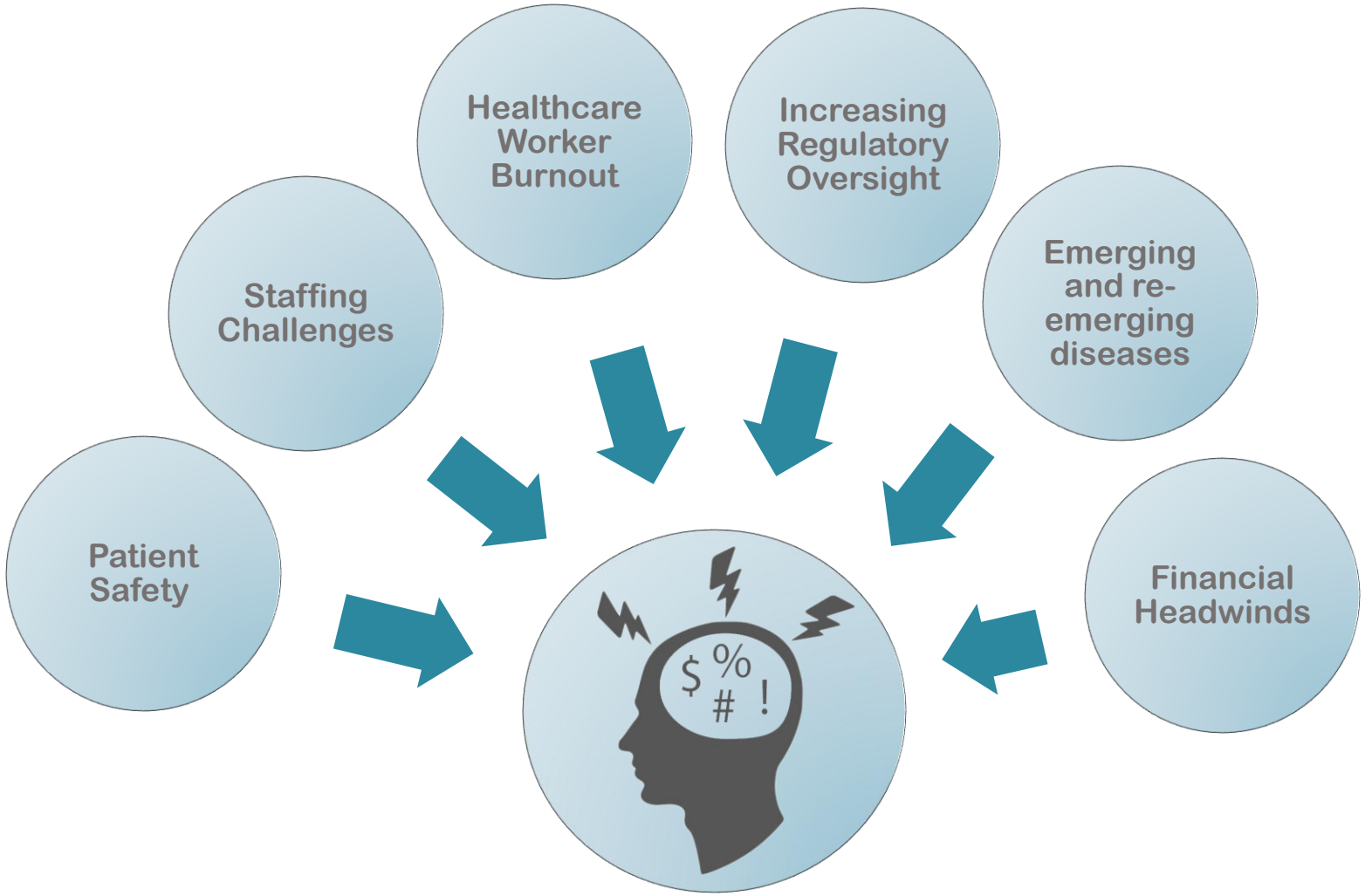
Objectives

Acknowledge Challenges

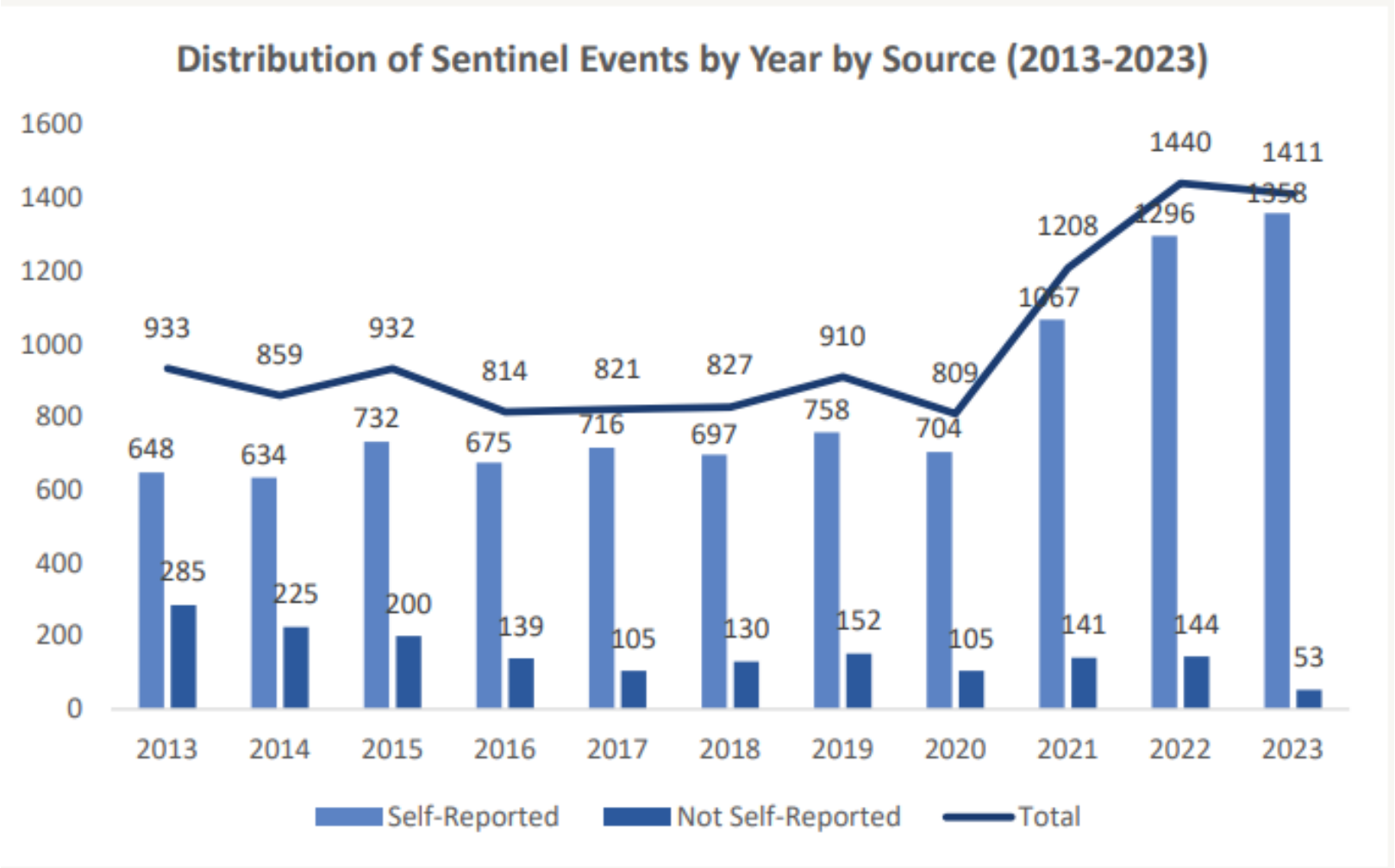
Value and Business Case

Grow and Retain Talent

Reasons for Mounting Pressures



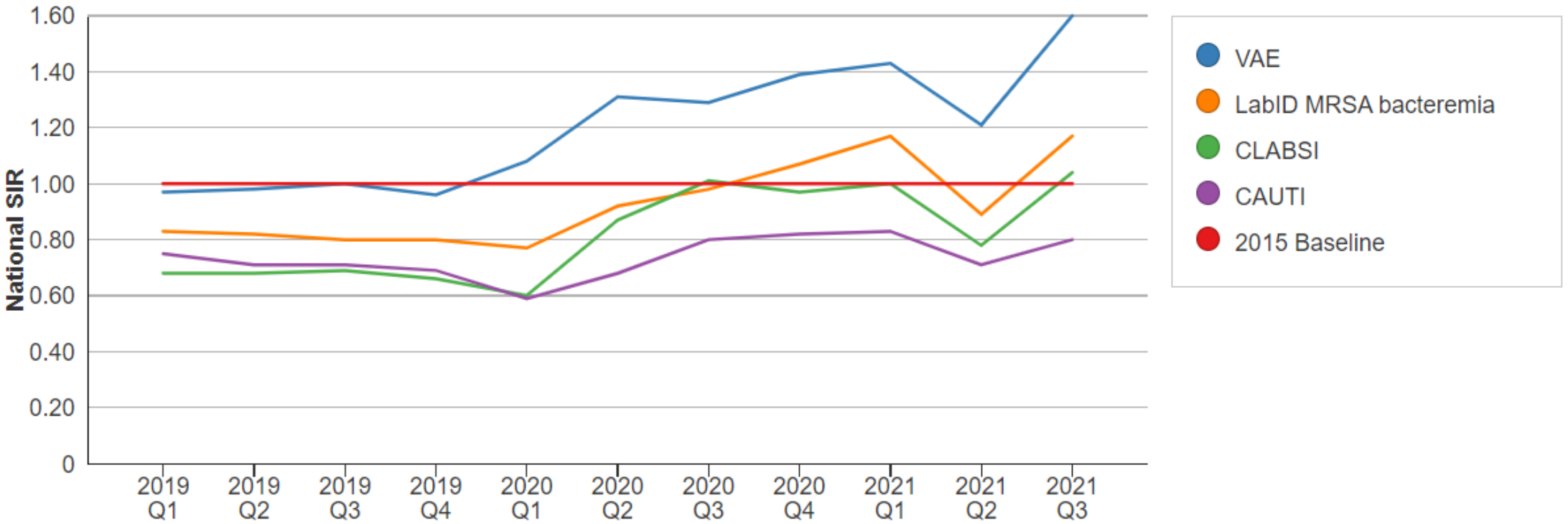
Rising Patient Safety Events



https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/sentinel-event/2024/2024_sentinel-event-_annual-review_published-2024.pdf

Impact of Pandemic on HAIs: Lessons for the Future

Figure 1. Quarterly National SIRs for Select HAI Types, 2019-Q1 - 2021-Q3



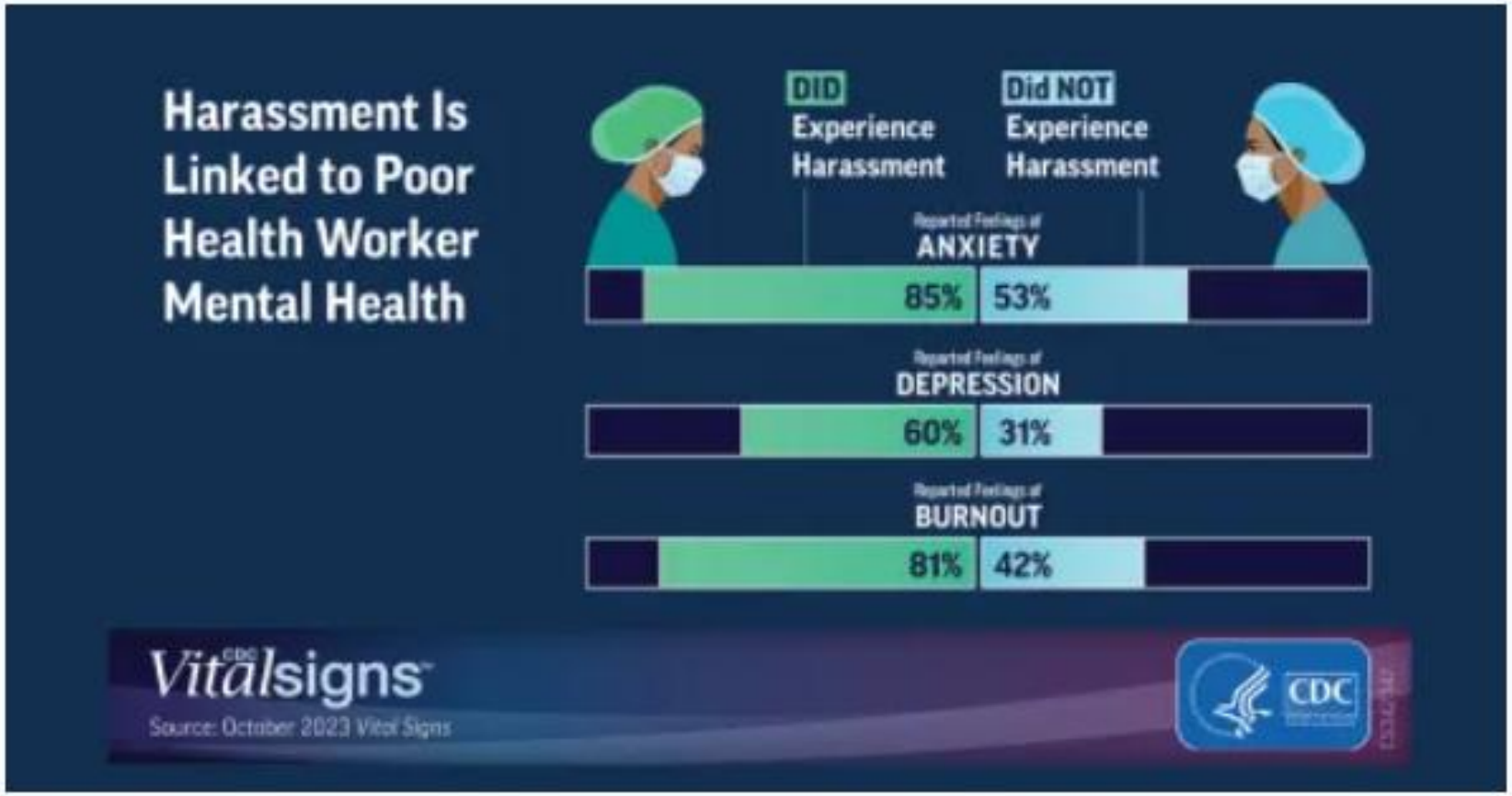
https://www.cdc.gov/hai/data/portal/covid-impact-hai.html

Staffing Challenges

- Retirements
  - 52% anticipate in the next 1-2 yrs
- Vacancies
  - 3-6 months to fill a position; up to a year
- Understaffed in non-acute care
  - IPs wear multiple hats
    - 58% report IP is less than half their job

Gilmartin H, Reese SM, Smathers SA. Recruitment and hiring practices in United States infection prevention and control departments: Results of a national survey. AJIC 2021; 49(1):70-74.
Pogorzelska-Maziarz M and Kalp E. Infection prevention outside of the acute care setting: Results from the MegaSurvey of infection preventionists. AJIC 2017; 45(6):597-602.
Stone P, Agarwal M, Pogorzelska-Maziarz M. Infection preventionist staffing in nursing homes. AJIC 2020; 48(3):330-332.

Burnout



Burnout among health care workers has “reached crisis levels,” according to Debra Houry, MD, MPH, the CDC’s chief medical officer. *Image: CDC*

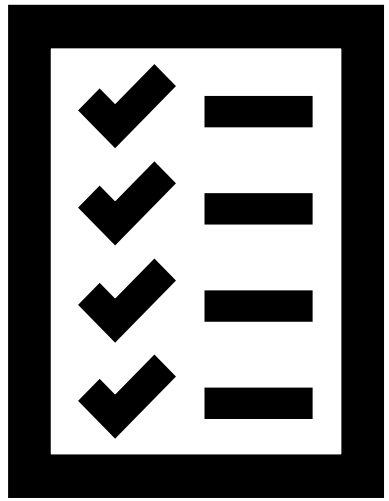
***"IPs are suffering along with their coworkers as an epidemic of burnout and job turnover roils the healthcare system amid an ongoing pandemic". ~*Ann Marie Pettis, RN 2021 President APIC**

- 65% report symptoms of burnout
- 70% meet the criteria for "high stress"
- 22% screened positive for depression
- 30% screened for positive for anxiety

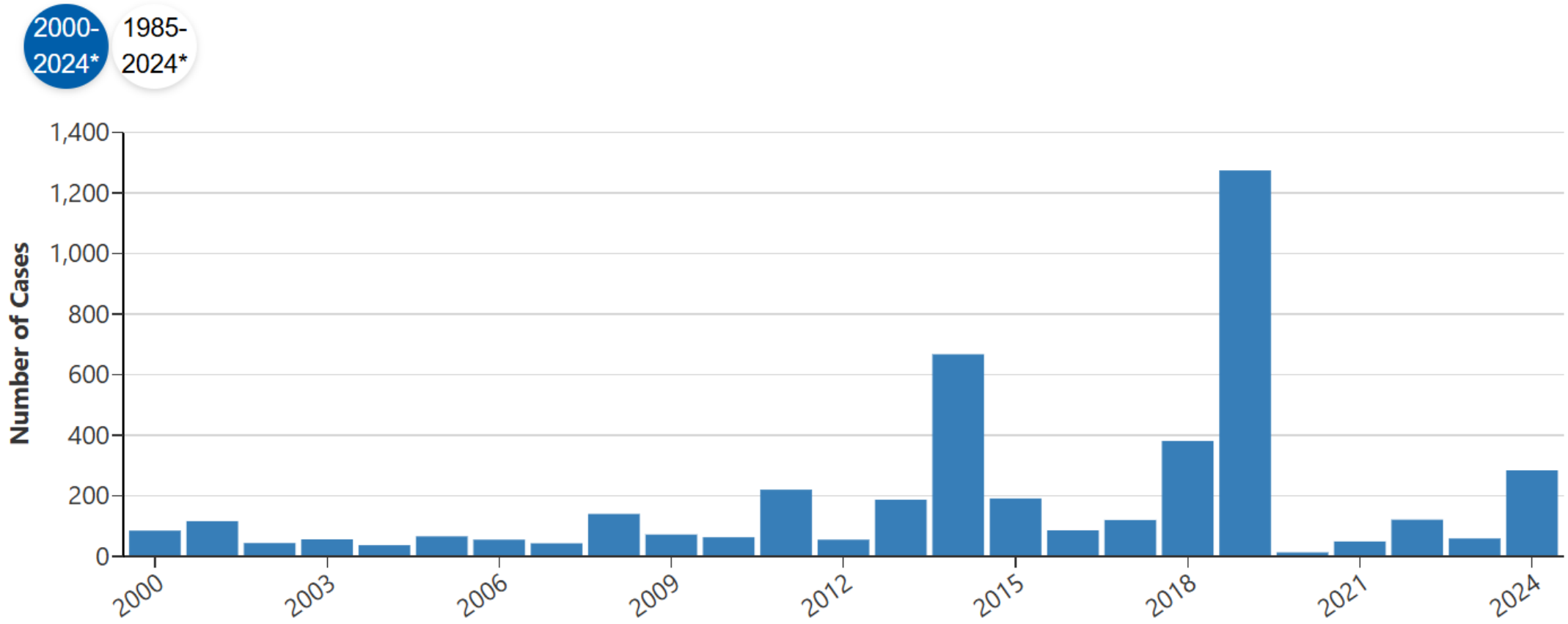
Melnyk BM, Hsieh AP, Mu J, Hopp DA, Miller S. Associations among infection prevention professionals' mental/physical health, lifestyle behaviors, shift length, race, and workplace wellness support during COVID-19. *Am J Infect Control.* 2023 Jan; 51(1):62-69. doi: 10.1016/j.ajic.2022.04.004. Epub 2022 Jul 14

Regulatory Oversight

- AAMI ST108
- CMS
- New Joint Commission IC standards
- Long Term Care Enhanced Barrier Precautions
- State/city mandates



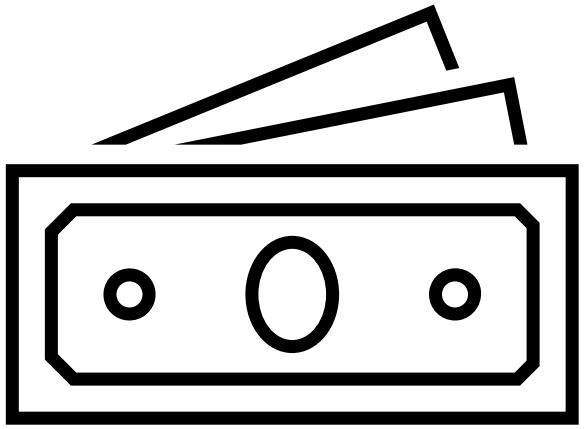
Re-emerging Infectious Diseases



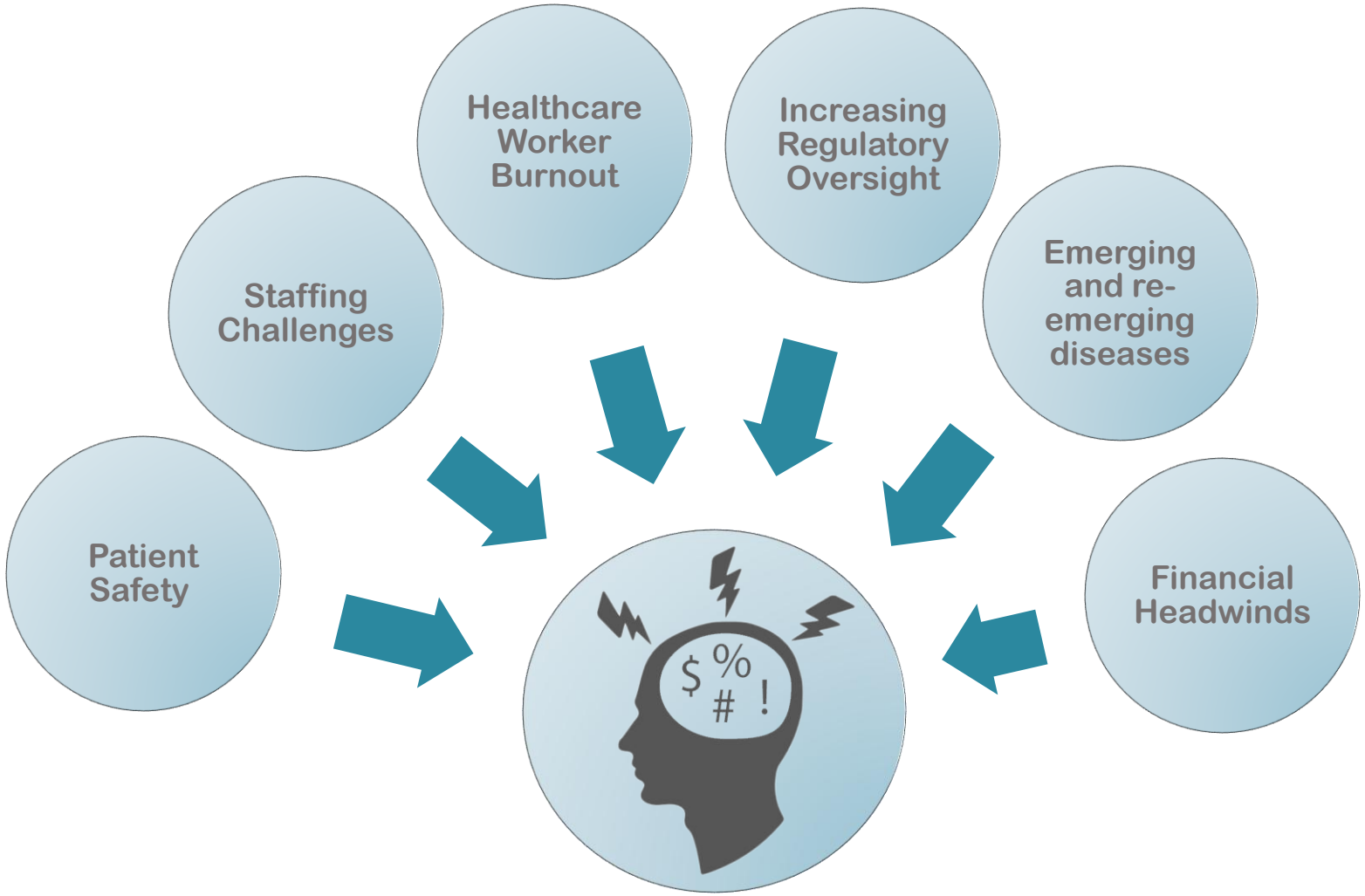
https://www.cdc.gov/measles/data-research/index.html

Financial Headwinds

- Increasing labor costs
- Inflation and supply chain costs
- Declining reimbursement
- Increased cost of caring for an aging population



Reasons for Mounting Pressures



Objectives

Acknowledge Challenges

Value and Business Case

Grow and Retain Talent

Value Starts with Improved Visibility

- Build awareness of what we do and why it's important
  - If no one understands our work, we can’t expect them to invest in us

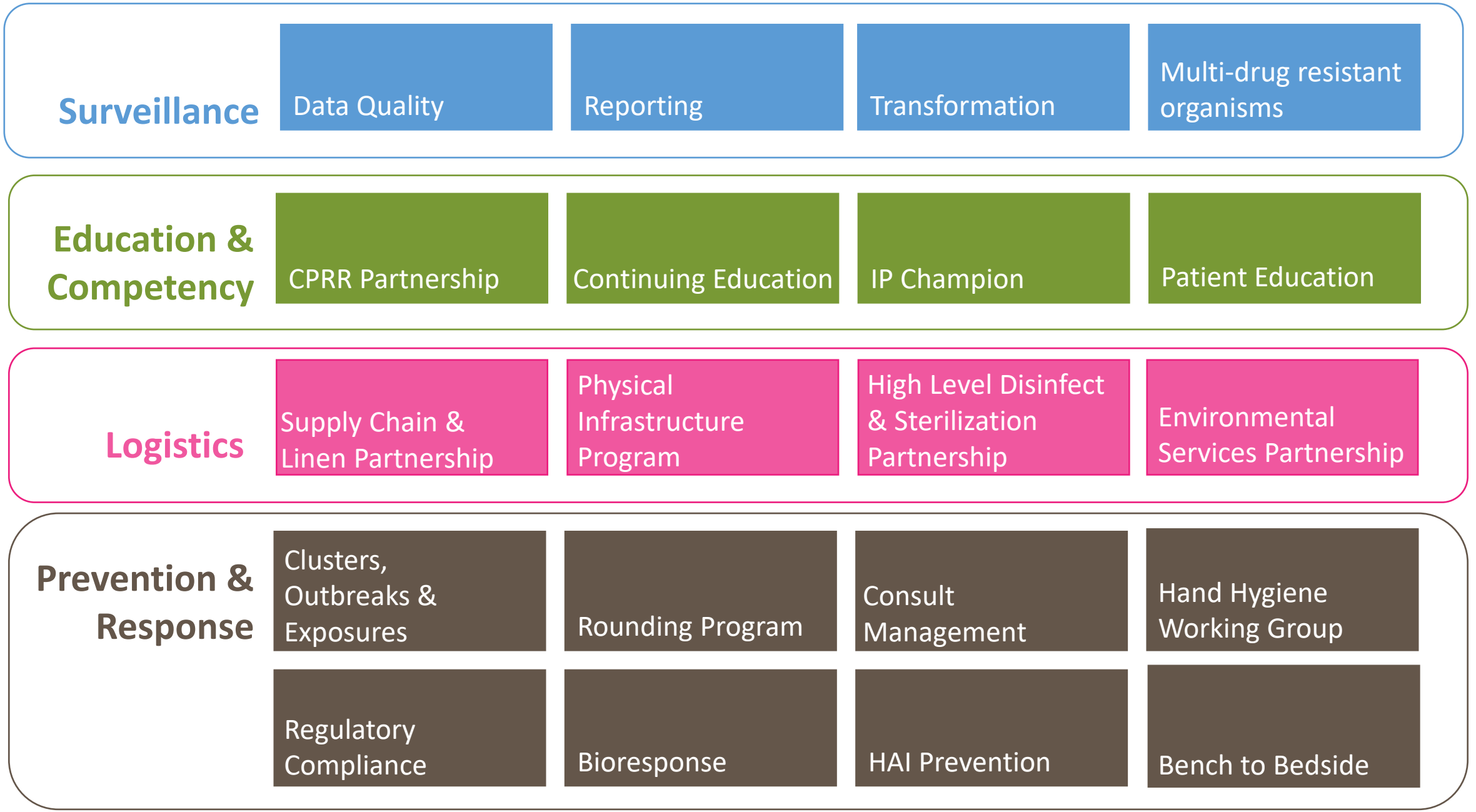
- Find ways to showcase your team and share successes
  - Tell the story, not just the data

- Sharing our value lets us track accomplishments and feel proud of our work

Welcome to Infection Prevention & Control

Articulate the Work

"IPC serves as CHOP's own health department. We are subject matter experts on preventing harm from infections to our patients, families, and employees. We do this through partnering and educating at the bedside and beyond. Our diverse portfolio includes monitoring for infections, managing the data, assessing the environment for risk, and disease response. We have our clean hands in everything!"

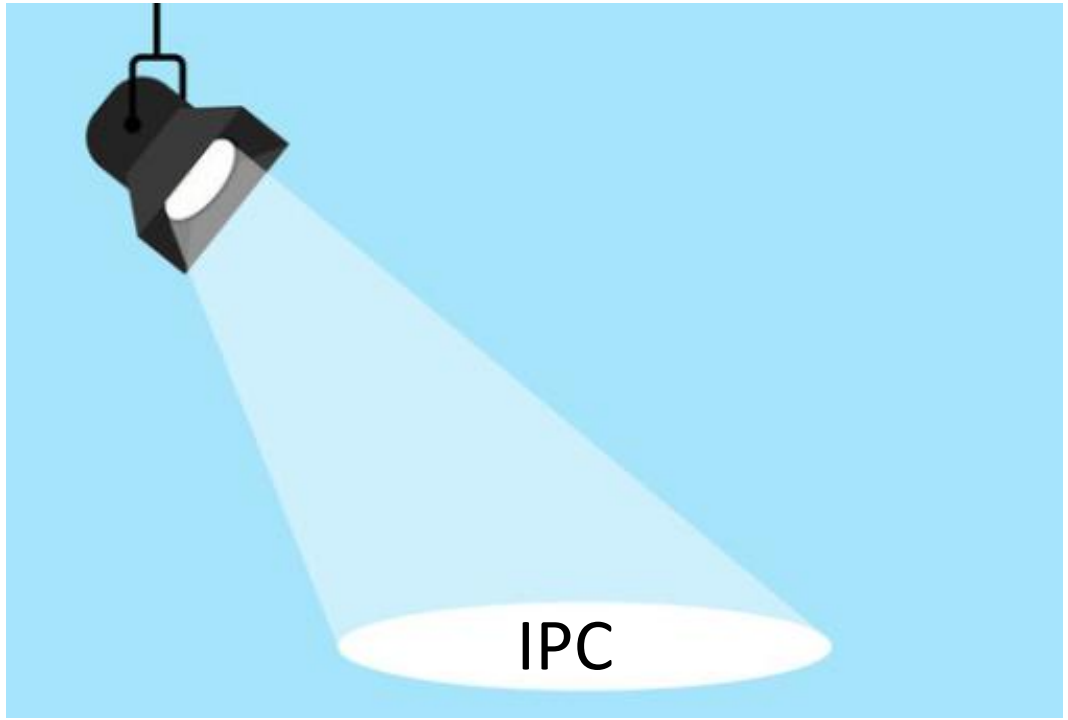

Surveillance
Data Quality
Reporting
Transformation
Multi-drug resistant organisms
Education & Competency
CPRR Partnership
Continuing Education
IP Champion
Patient Education
Logistics
Supply Chain & Linen Partnership
Physical Infrastructure Program
High Level Disinfect & Sterilization Partnership
Environmental Services Partnership
Prevention & Response
Clusters, Outbreaks & Exposures
Rounding Program
Consult Management
Hand Hygiene Working Group
Regulatory Compliance
Bioresponse
HAI Prevention
Bench to Bedside

Showcase key metrics

- Showcase value and impact of IP work on patient outcomes and/or regulatory compliance
  - Preventing harm
  - Avoiding fines/penalties
  - Financial stewardship
- Simple to explain and understand

Pillar	Objective	Metric	Frequency	Target	Current	Trend
Prevention & Response	Hand hygiene quality	% compliance with 15 sec rub	Monthly	80%	75%	
Prevention & Response	Outbreak days	Number days inpatient outbreak	Monthly	0	5	
Logistics: Physical Infrastructure	Monitoring water quality	Water tests reviewed for quality issues	Quarterly	90%	95%	
Education	Trainings for construction contractors	# of trained contractors	Quarterly	100	85	
Surveillance	Productivity hours for infection reporting	Hours from infection review to submission	Weekly	0.5	2	

Capitalize on Opportunities

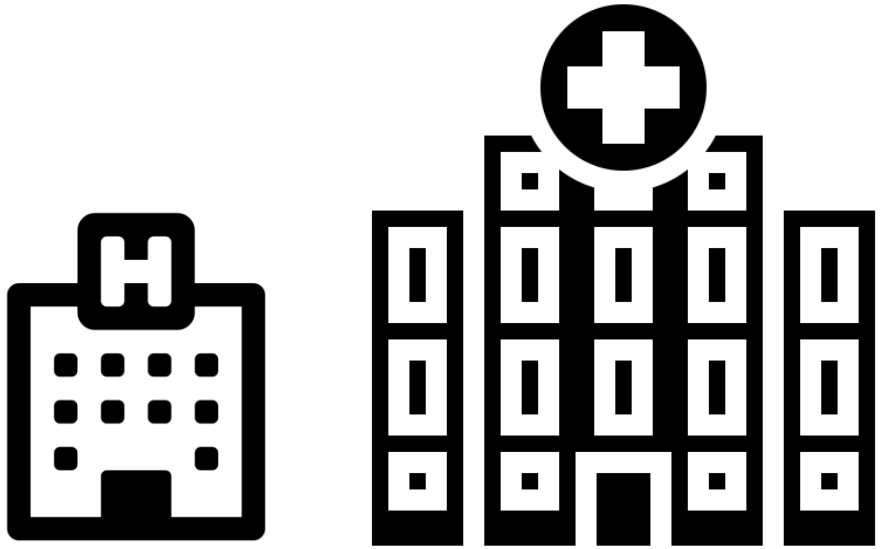


- Leverage successes of the pandemic/outbreaks
- Embed staffing expectations into new builds
- Use FTEs from retirements to grow at cost neutral
  - Replace with “Plus 1”
    - 2 novice IPs
    - IP + Data Analyst

Literature on Staffing Resources

- Previously sparse & largely outdated
  - **1.0 IP per 100 acute care beds**
- No physician support
- No recommendations for non-acute care

- **Only accounted for beds; not needs**



Is Accounting for Acute Care Beds Enough?

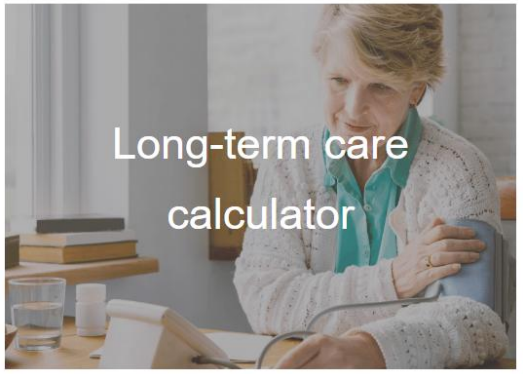
Variable	Acute care bed equivalent	CHOP counts
Acute care bed	1	334
Intensive care bed	2	199
Long-term care bed	½	0
Dialysis facility	50	1
Ambulatory surgery center	50	4
Ambulatory clinic	10	
Private physician office	5	31

K.A. Gase, H.M. Babcock. American Journal of Infection Control 43 (2015) 165-6.

Quantifying Needs

- Assessed IPC-related tasks with **key stakeholders**
- Estimated **current** time spent and **ideal** state
- IPs spent >50% time conducting surveillance; less than 1hr/wk on professional development
- New benchmark: 1.0 IP FTE per 69 beds

- APIC staffing calculator



Bartles R, Dickson A, Babade O. A systematic approach to quantifying infection prevention staffing and coverage needs. AJIC 2018; 46(5): 487-491.

Medical Director Support

TABLE 2. Healthcare Epidemiologist/Medical Director–Recommended Resource Allocation

Variable	Hospital has ≥300 beds and/or ≥50 ICU beds	Hospital has <300 beds and/or <50 ICU beds
Academic-based institutions	≥1.5 FTE of full professor salary (based on AAMC salary compensation) towards infection control	≥1 FTE of full professor salary towards infection control
Community-based hospitals	≥1.0 FTE salary of regional market value towards infection control[a]	≥0.5 FTE salary towards infection control

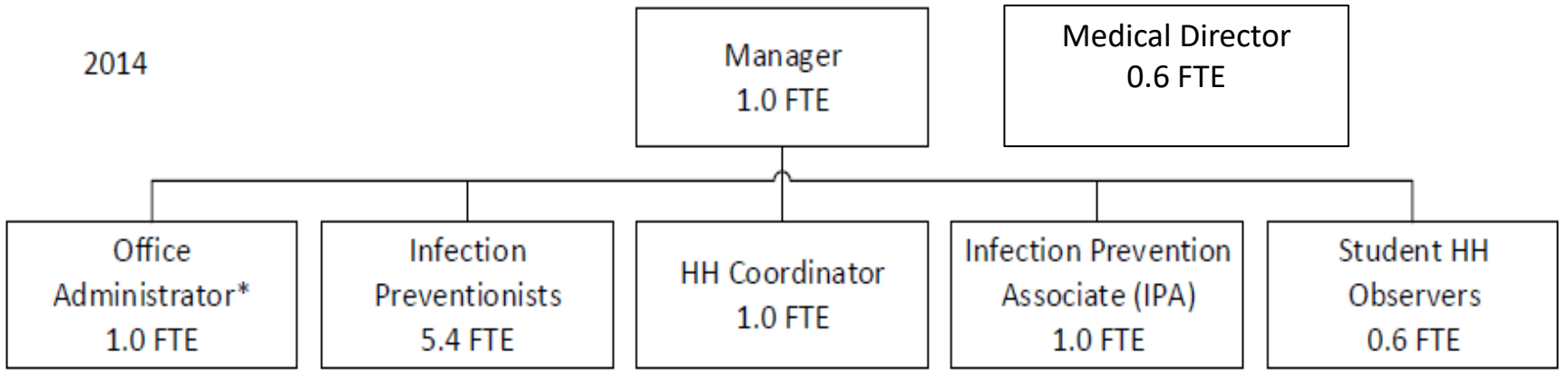
NOTE. AAMC, Association of American Medical Colleges; FTE, full-time equivalent; ICU, intensive care unit.
[a]This reimbursement should allow protected time for the hospital epidemiologist to perform these activities.

Bryant KA, Harris AD, Gould CV et al (2016). Necessary Infrastructure of Infection Prevention and Healthcare Epidemiology Programs: A Review. *Infect Control Hosp Epidemiol.* 2016;37:371-380.

If at first you don't succeed…

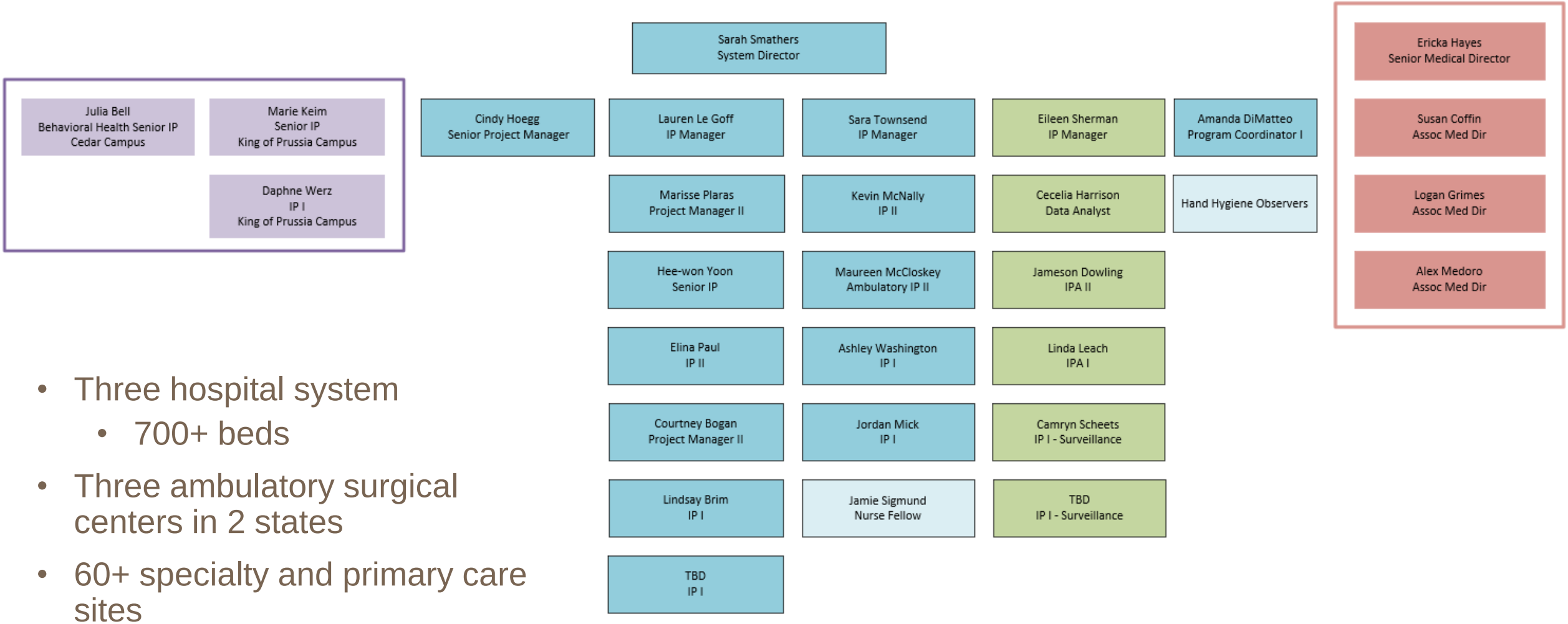
- Initial Request
  - *"I need more IPs to better support operational needs in areas that are **being neglected** (e.g. ambulatory, high level disinfection)"*
- Feedback from C-suite
  - *"You guys are doing a great job. No one is going to believe me that you aren't doing your job."*

Our Journey: Then



- One hospital with 365 beds
- Two ambulatory surgical centers in 2 states
- 30 specialty and primary care sites
  - ~ 1M outpatient visits/year

Our Journey: Now



- Three hospital system
  - 700+ beds
- Three ambulatory surgical centers in 2 states
- 60+ specialty and primary care sites
  - 1.6M outpatient visits/year

Objectives

Acknowledge Challenges

Value and Business Case

Grow and Retain Talent

Recruiting Talent

Nurse Fellow Program

12 month fellowship

Practicing RN with at least 3 years experience

Manager support for 8 hours per week

Provided with IPC training while supporting and leading project-based work to embed reliable prevention practices related to departmental priorities for infection prevention strategies

Student Interns

Drexel online Master of Science in Infection Prevention

Allows IPC departments to “trial” students for potential future roles

Supports IP department work at low cost

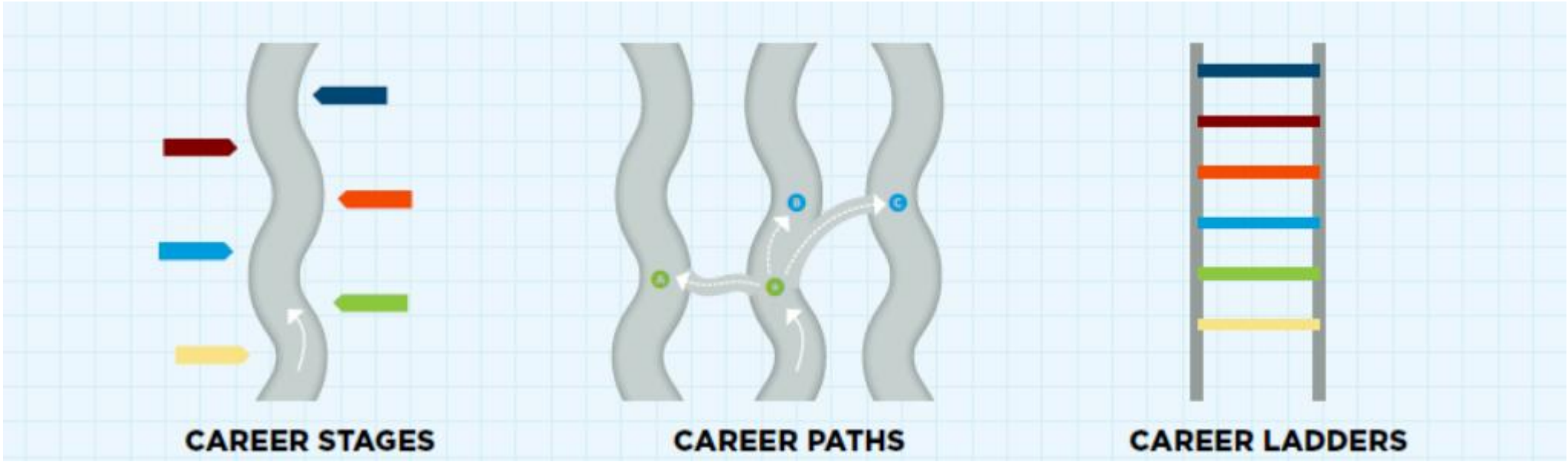
Mentors future gen of IPs

Professional Growth

- Focus on individual professional development
- Provide role diversity

Professional Development

Infection Preventionist Career Development and Advancement Guide



https://apic.org/professional-practice/infection-preventionist-career-development-and-advancement-guide/

Role Diversity

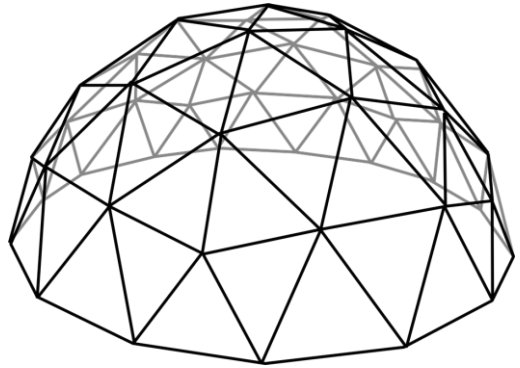
Preventing and controlling infectious diseases/HAIs

Interpretation of surveillance data

Management and communication: feedback

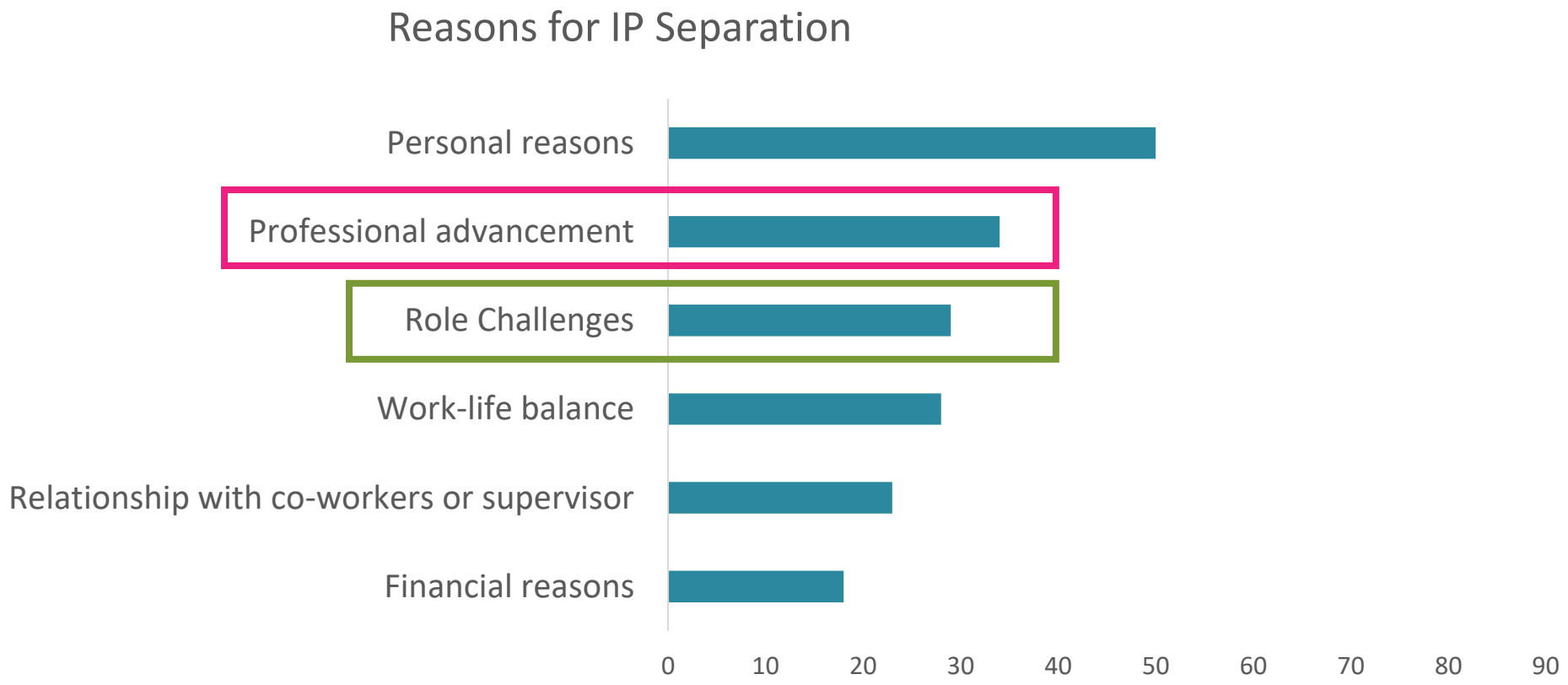
Reese SM, Gilmartin HM. Infection prevention workforce: Potential benefits to educational diversity. Am J Infect Control 2017; 45(6):603-606.

Putting it Together



Infection Preventionist (IP)	Infection Prevention Associates (IPA) and Data Analysts	Project Managers	IP Leadership	Medical Directors	Antimicrobial Stewardship
IP I	IPA I	Project Manager I	Supervisor	Asst Medical Director	Pharmacist I
IP II	IPA II	Project Manager II	Manager	Assoc Medical Director	Pharmacist II
Senior IP	IP Data Analyst (I, II, Senior)	Senior Project Manager	Senior Manager	Medical Director	Senior/Lead Pharmacist
	Supervisor		Director	Sr. Medical Director	Manager
	Manger		System Director	Chief	Director

Strategies to Retain and Grow IPs



Gilmartin, H, Smathers, S, Reese, S (Under Review) Infection Preventionist Retention and Professional Development Strategies: Insights from a National Survey. Am J Infect Control.

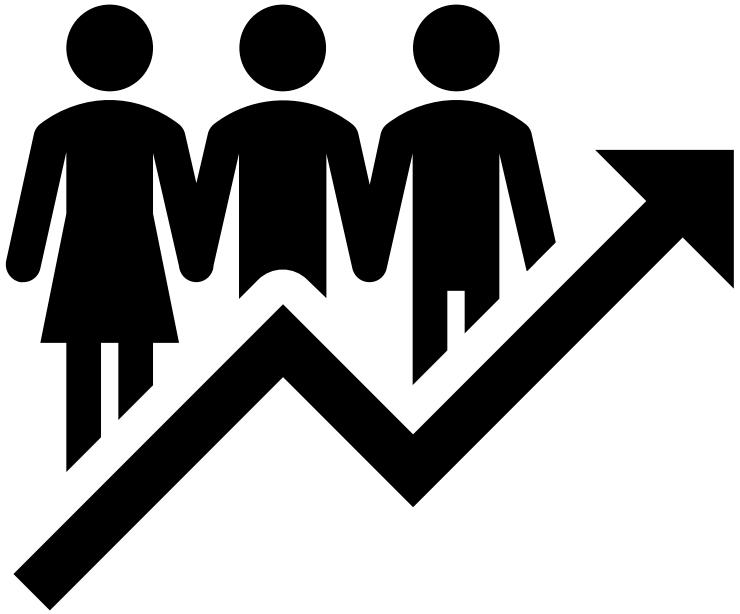
Causes of Burnout

- Burnout ≠ broken people
- Burnout = broken systems
- Addressing burnout is an "All Hands-on Deck" effort

Perlo, J., Balik, B., Swenson, S., Kabcenell, A., Landsman, J., & Feeley, D. I. H. I. (2017). IHI framework for improving joy in work.
Moss, J. (2021) Beyond Burned Out. Harvard Business Review.

Addressing Burnout Improves Performance

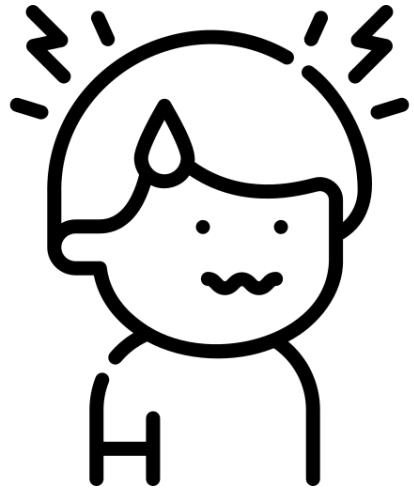
- Employee health
- Employee engagement
- Absenteeism
- Turnover
- Decision making
- Patient satisfaction & safety



Havens, D. S., Gittell, J. H., & Vasey, J. (2018). Impact of relational coordination on nurse job satisfaction, work engagement and burnout: Achieving the quadruple aim. *JONA: The Journal of Nursing Administration*, *48*(3), 132-140.
Addressing Health Worker Burnout: The U.S. Surgeon General's Advisory on Building a Thriving Health Workforce (2022) https://www.hhs.gov/surgeongeneral/priorities/health-worker-burnout/index.html

System Level Drivers of Burnout

- Excessive workload & work schedules
- Inadequate staffing
- Administrative burdens
- Workflow/interruptions/distractions
- Inadequate technology usability
- Time pressures



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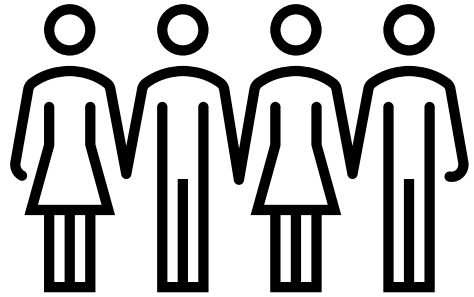
Kelley, E., Berkman, L., Kubzansky, L., Lovejoy, M. (2021). 7 Strategies to improve your employees' health and well-being. Harvard Business Review

Team Level Practices to Address Burnout

- Control over work
- Flexibility over when & where to work
- Support personal needs
- Foster a sense of belonging and personal connections
- Adequate staffing and reasonable workloads

Ask “What matters to you?”



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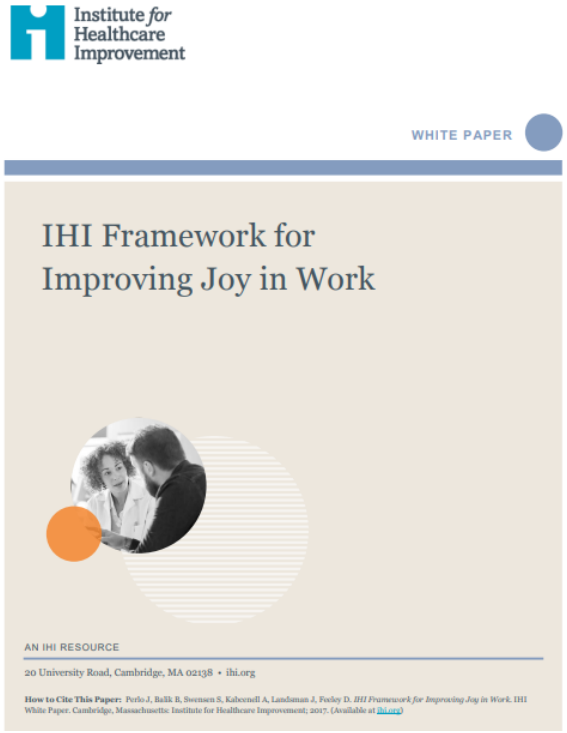
Kelley, E., Berkman, L., Kubzansky, L., Lovejoy, M. (2021). 7 Strategies to improve your employees’ health and well-being. Harvard Business Review

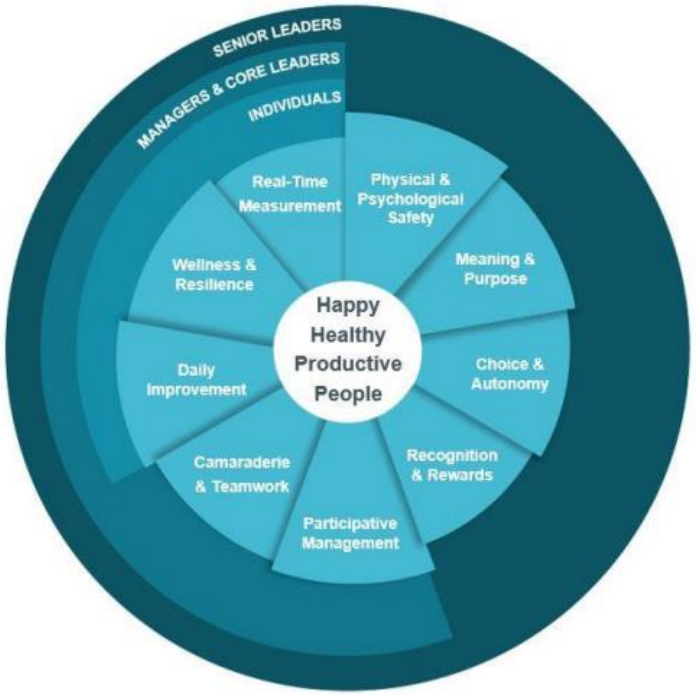
Signs to look for that impact wellbeing and contribute to burn out

- Staff report feeling "overwhelmed"
- Lack of engagement
- Unclear about priorities; unable to decide where to start
- Trouble disconnecting from work

Joy is the Key to Retention

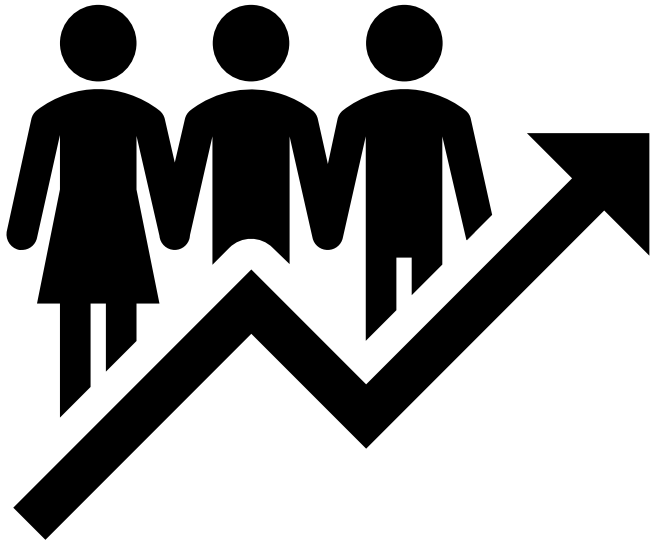
Institute for Healthcare Improvement





Focusing on Joy Improves Performance

- Organizations that focus on joy in work report:
  - **Improved** patient experience
  - **Improved** patient outcomes
  - **Improved** patient safety
  - **Lower** costs of care
  - **Improved** employee well-being



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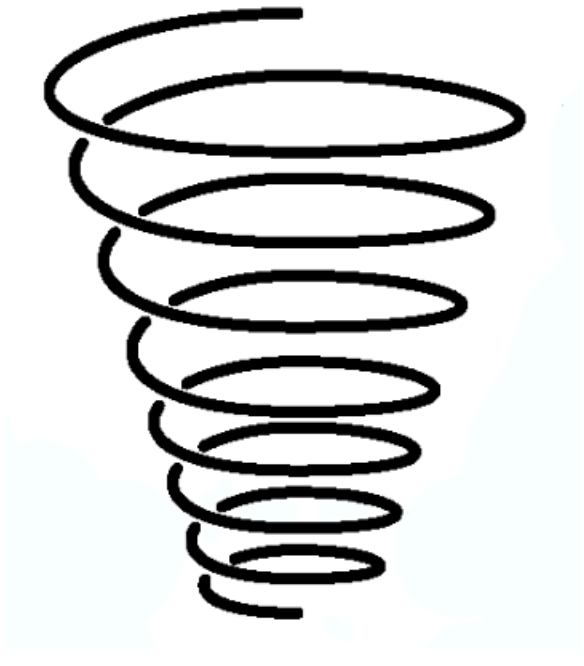
Removing Barriers to Joy in Work

- Identify and remove the daily pain points that sap energy and enjoyment
- Example: Daily distractions from interruptions

Perlo, J., Balik, B., Swenson, S., Kabcenell, A., Landsman, J., & Feeley, D. I. H. I. (2017). IHI framework for improving joy in work

Gratitude at Work



- The readiness to show appreciation for kindness and to return kindness
- Appreciating and expressing gratitude at work is a simple way to support joy in work
- Hundreds of studies have documented the social, physical and psychological benefits of gratitude

Gilmartin H, Saint S. Finding Joy in Medicine: A Remedy for Challenging Times. *NEJM Catalyst Innovations in Care Delivery* 2022. https://catalyst.nejm.org/doi/pdf/10.1056/CAT.22.0215

Connections at Work

- Positive connections increases joy in work:
  - Energizing
  - Increase a team's ability to cope with stress
  - Source of well-being

Gittell, J. H., & Ali, H. N. (2021). *Relational Analytics: Guidelines for Analysis and Action*. Routledge.
Madden, L., Mathias, B. D., & Madden, T. M. (2015). In good company: The impact of perceived organizational support and positive relationships at work on turnover intentions. *Management Research Review*.

Savor our Successes

- Team building activity that connects team members and nourishes joy
  - Positive psychology and science of **savoring**
  - Deliberate mindful awareness through the lens of **gratitude, basking**, l**uxuriating**, and **marveling**

- Small, everyday practices:
  - End of the day debrief or weekly staff meeting, ask team members to share:
    - What were your high points or a win that happened at work this week?
  - Thank people for sharing and encourage them to **savor** their successes

Prevention Strategist (APIQ) - Fall 2023 (apic.org)
The Language of Caring Workbook: https://bit.ly/3sJ6M2b

Summary

- Showcase your value and accomplishments
- Leverage successes and improve visibility to show value & support business case
- Include career paths and role diversity that promotes and elevates our profession
- Practice joy and gratitude

Questions?