



Burnout and Wellness in Hematology/Oncology Pharmacy

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Disclosures

- Bristol Myers Squibb - Medical Science Liaison (2021 - Present)
- AstraZeneca - Consultant (2021)
- Merck - Speakers Bureau (2019-2021)



Objectives

- Define the impact of burnout on health care providers and patients
- Acknowledge key results related to hematology/oncology pharmacist burnout
- Describe opportunities for well-being in the workforce
- Explore potential initiatives and collaborations across pharmacy organizations



Poll Question #1

What is your current practice setting?

- Hospital/Inpatient
- Ambulatory Clinic/Infusion
- Industry
- Academia
- Managed Care
- Specialty Pharmacy
- Student/Resident
- Other



Poll Question #2

How many years have you been in practice?

- Student/Resident
- 0-2 years
- 3-5 years
- 5-10 years
- ≥ 10 years



Poll Question #3

What is your current role?

- Student/Resident
- Staff Pharmacist
- Clinical Pharmacist
- Manager/Supervisor/Director
- Professor
- Other



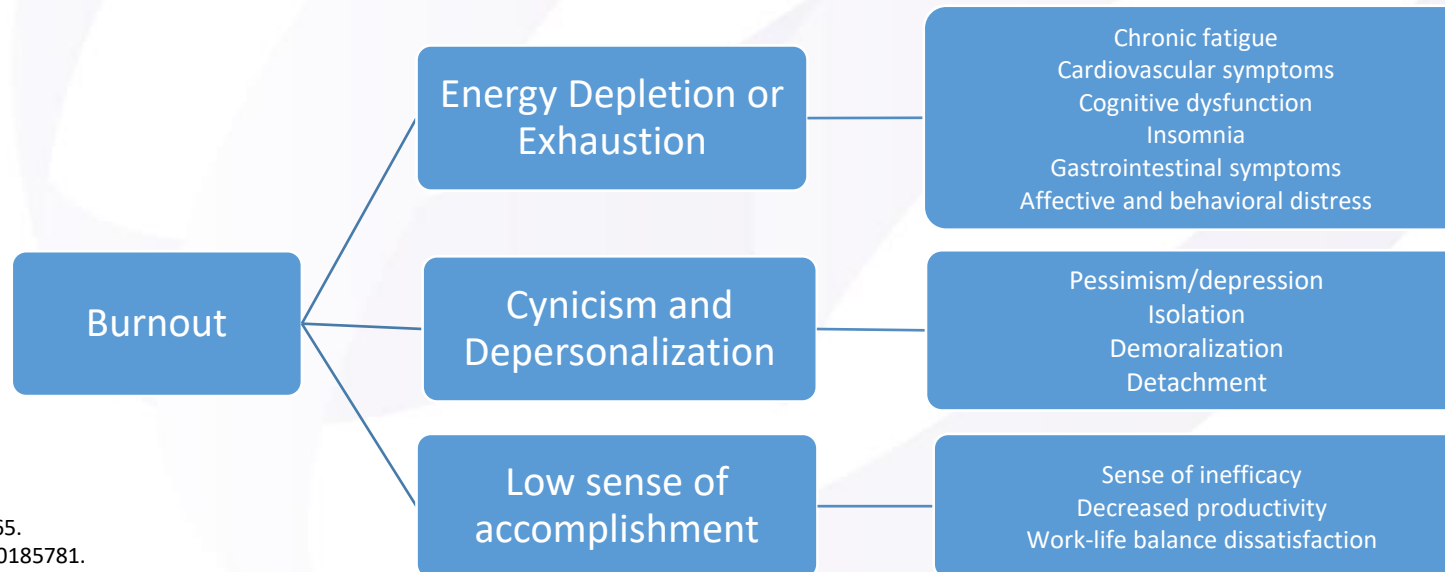
Poll Question #4

What country are you from?



Background

- Burnout is defined as an occupational-related syndrome
 - First identified in 1974 by Dr. Herbert Freudenberger
 - Not a formal medical or mental health disorder
 - Incorporated into International Classification of Diseases 11th Revision (ICD-11; QD85 Burnout)



Freudenberger HJ. J Soc Issues. 1974;30:159-165.

Salvagioni DAI, et al. PLoS ONE. 2017; 12(10):e0185781.

Hlubocky FJ, et al. Am Soc Clin Oncol Educ Book. 2021;41:e339-e353.

World Health Organization. International Statistical Classification of Disease and Related Health Problems, 11th ed. Geneva:2020.



Impact of Burnout

- \$4.6 billion in yearly costs in the United States

Organizational	Professional	Personal
↓ Patient safety	Erosion in teamwork	↑ Substance abuse
↑ Errors	↓ Sense of professional accomplishment	↑ Symptoms fatigue, gastrointestinal disturbances, headache
↑ Infection	Work disengagement	↑ Family discord
↑ Turnover	Poor team communication	Altered sleep
↑ Patient mortality	↑ Occupational injury	Impaired concentration
↓ Patient satisfaction	↑ Absenteeism	Altered eating patterns
↑ Patient length of stay	Poor patient communication	↓ Social interaction
↑ Costs	Incivility potential	↑ Anger, cynicism, blaming
↑ Malpractice claims	Suboptimal performance	↑ Depression, suicide

Han S, et al. Ann Intern Med. 2019;170:784-790.

Hlubocky FJ, et al. Am Soc Clin Oncol Educ Book. 2021;41:e339-e353.



U.S. Surgeon General Advisory – 2022

- Projected health worker shortages
 - >3 million essential low-wage health workers in the next five years
 - ~140,000 physicians by 2033



Addressing Health Worker Burnout: The US Surgeon General's Advisory on Building a Thriving Health Workforce. U.S. Department of Health and Human Services Office of the U.S. Surgeon General. 2022.



Key Drivers for Burnout

- Influenced by individual, work unit, organizational, and national factors





Measuring Burnout

Scale	Description	Comments
Maslach Burnout Inventory (MBI)	22 questions with three subscales	<ul style="list-style-type: none"> • Gold standard • High burnout: <ul style="list-style-type: none"> • ≥27 Emotional exhaustion • ≥10 Depersonalization • <33 Personal accomplishment
Well-Being Index	9 questions focused on six dimensions of distress and well-being	<ul style="list-style-type: none"> • Measures risk of medical error for certain healthcare providers • Available for seven distinct populations
Mini-Z Survey	11 questions (one open-ended question) measuring satisfaction, stress, burnout, work control, chaos, values alignment, teamwork, and documentation demands	<ul style="list-style-type: none"> • Zero Burnout Program • Adapted from Physician Job Satisfaction Scale and validated against MBI • Updated versions and templates for use both inside and outside of healthcare

Other examples include: Physician Job Satisfaction Scale, Areas of Work Life Survey, Empowerment at Work Scale, Oldenburg Burnout Inventory, Shirom-Melamed Burnout Measure, Copenhagen Burnout Inventory

Maslach C, et al. Maslach Burnout Inventory Manual. Palo Alto, CA: Consulting Psychologists Press; 1996.

Well-Being Index, www.mywellbeingindex.org/. Accessed 15 February 2023.

The Institute for Professional Worklife, <https://www.professionalworklife.com/mini-z-survey>. Accessed 15 February 2023.

Shanafelt TD, et al. Mayo Clin Proc. 2017;92(1):129-146.



Hematology/Oncology Team Burnout

Type of Teammate	Burnout
Physicians	<ul style="list-style-type: none"> 45% U.S. ASCO Oncologists (2021)
Advanced Practice Providers	<ul style="list-style-type: none"> 31.3% NPs (2015); intent to leave correlated to emotional exhaustion and depersonalization 53.3% PAs (2019); increased from 2015 despite adjustments for age, sex, relationship status, practice setting, subspecialty, practice type and hours worked
Nurses	<ul style="list-style-type: none"> 35-54% (2022); 2 in 5 intend to leave practice
Pharmacists	<ul style="list-style-type: none"> 53% (2018); highest burnout among multiple professional groups with the highest mean moral distress scores
Pharmacy Technicians	<ul style="list-style-type: none"> Turnover rates of at least 21-30% (2021) with 89% of health-system pharmacy administrators using pharmacists to fill in shifts or duties

Hlubocky FJ, et al. Am Soc Clin Oncol Educ Book. 2021;41:e339-e353.

Bourdeanu L, et al. J Adv Pract Oncol. 2020;11:141-148.

Tetzlaff ED, Ruth K, et al. J Clin Oncol. 2020;38:15s (suppl; abstr 11009).

Addressing Health Worker Burnout: The US Surgeon General's Advisory on Building a Thriving Health Workforce. U.S. Department of Health and Human Services Office of the U.S. Surgeon General. 2022.

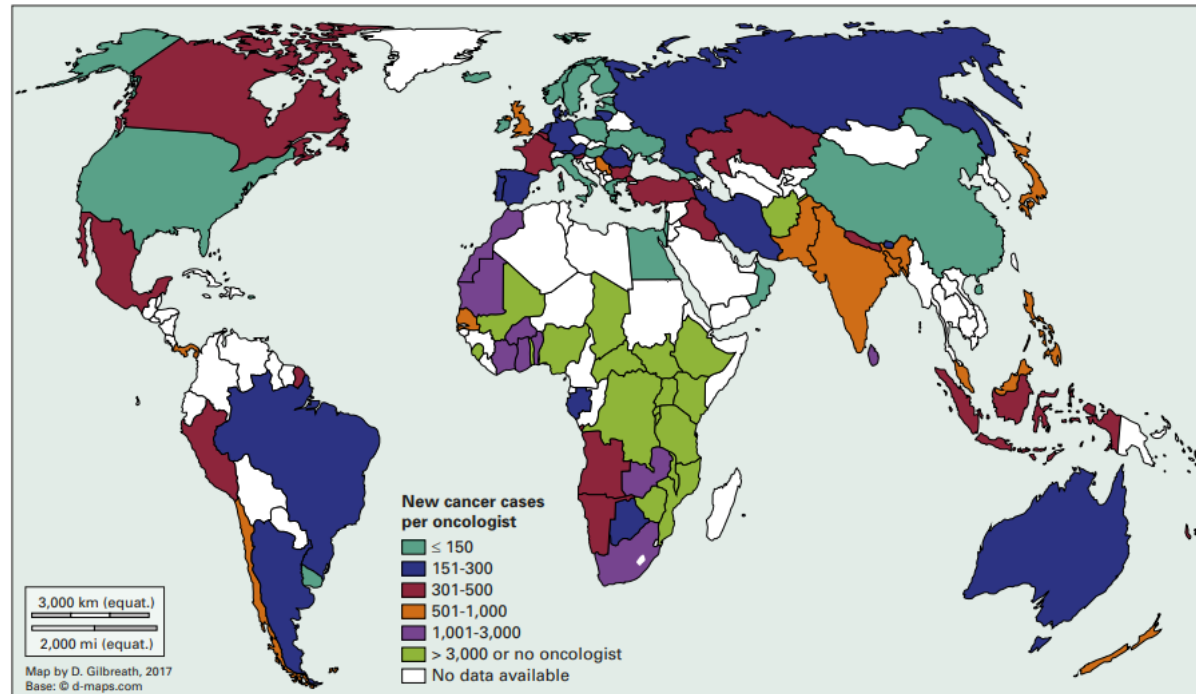
Neumann JL, et al. Biol Blood Marrow Transplant. 2018;24:849-860.

ASHP Pharmacy technician shortage survey findings executive summary. <https://www.ashp.org/-/media/assets/pharmacy-technician/docs/Technician-Shortage-Survey-Exec-Summary.pdf>. Accessed 15 February 2023



Global Oncology Workforce - Oncologists

- United Nations Sustainable Development Goal 3
 - Ensure healthy lives and promote well-being for all at all ages



Mathew A.J Glob Oncol 2018; 4:1-12.

United Nations -The 17 Goals, <https://sdgs.un.org/goals>. Accessed 15 February 2023.



Global Oncology Workforce - Nurses

- Challenges may be underreported in low and middle-income countries
- Rural areas may offer more autonomy but also isolate from support services
- Specialized training and occupational safety standards are needed
- Burnout may differ based on culture and region

	Country	Number of nurses	Proportion of nurses with high levels of emotional exhaustion	Proportion of nurses with high levels of depersonalisation	Proportion of nurses with low levels of personal accomplishment
Shen et al (2019) ³²	China	3100	30.2%	19.9%	47.2%
Üzar Özçetin et al (2019) ⁵⁹	Turkey	66	36%	17%	10%
Molavynejad et al (2019) ⁶⁰	Iran	106	19%	19.8%	44.7%
Cañadas-De la Fuente et al (2018; meta-analysis) ⁶¹	USA (seven studies); Italy (three studies); Turkey (one study); Spain (one study); Sweden (one study); Greece (one study); Australia (one study); Canada (one study); China (one study)	9959	30% (mean)	15% (mean)	35% (mean)
Mego Saavedra (2017) ⁶²	Peru	9	44.4%	44.4%	22.2%
Nabadda (2012) ⁶³	Uganda	65	31.7%	9.5%	32.9%
Gallegos-Alvarado et al (2009) ⁶⁴	Mexico	31	3%	0%	13%

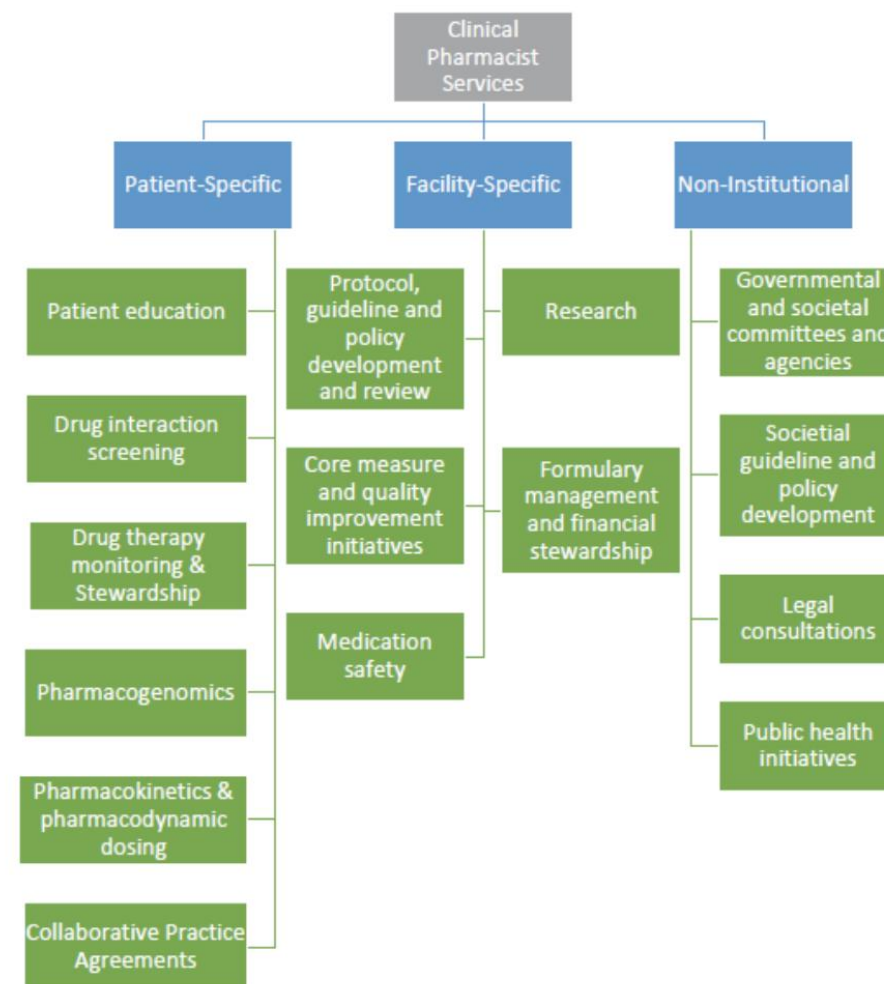
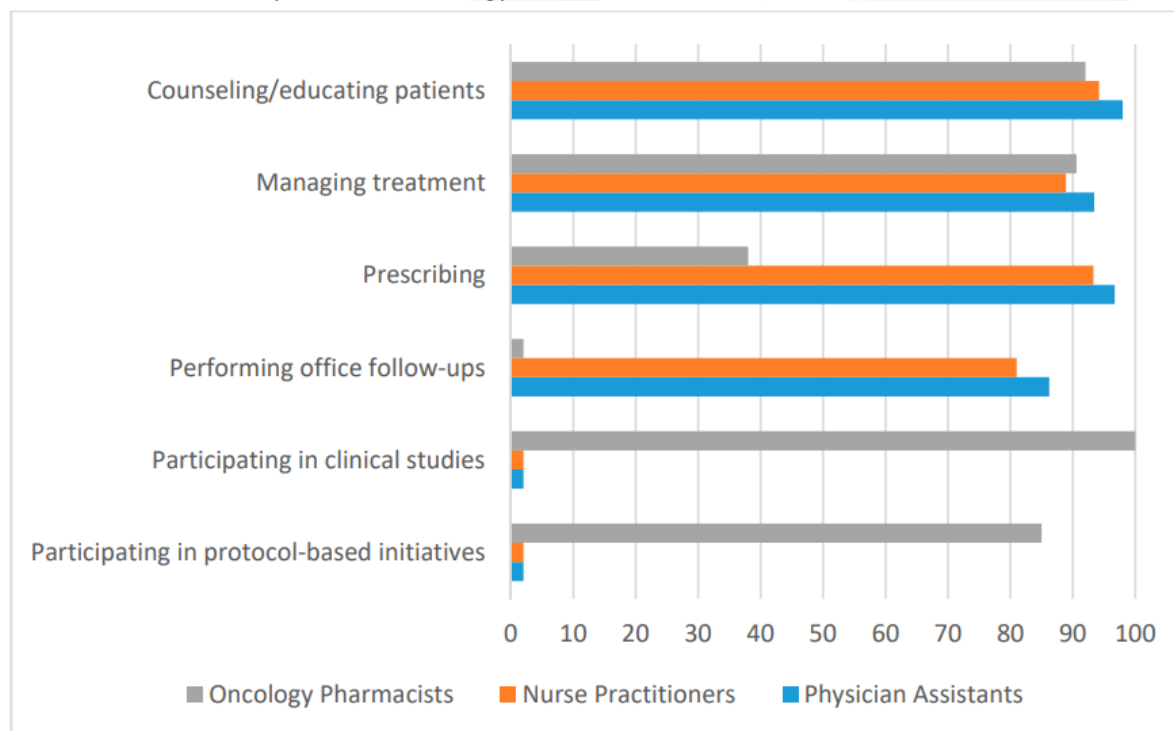
Proportions are shown to the number of decimal places as reported in each study.

Table: Results from studies of oncology nursing burnout from high-income, middle-income, and low-income countries using the Maslach Burnout Inventory instrument



Clinical Pharmacist Role

Comparison of Oncology Pharmacist and APP (NP/PA) Activities



Rao K, et al. J Am Coll Clin Pharm 2022; 5(11):1112-1120.

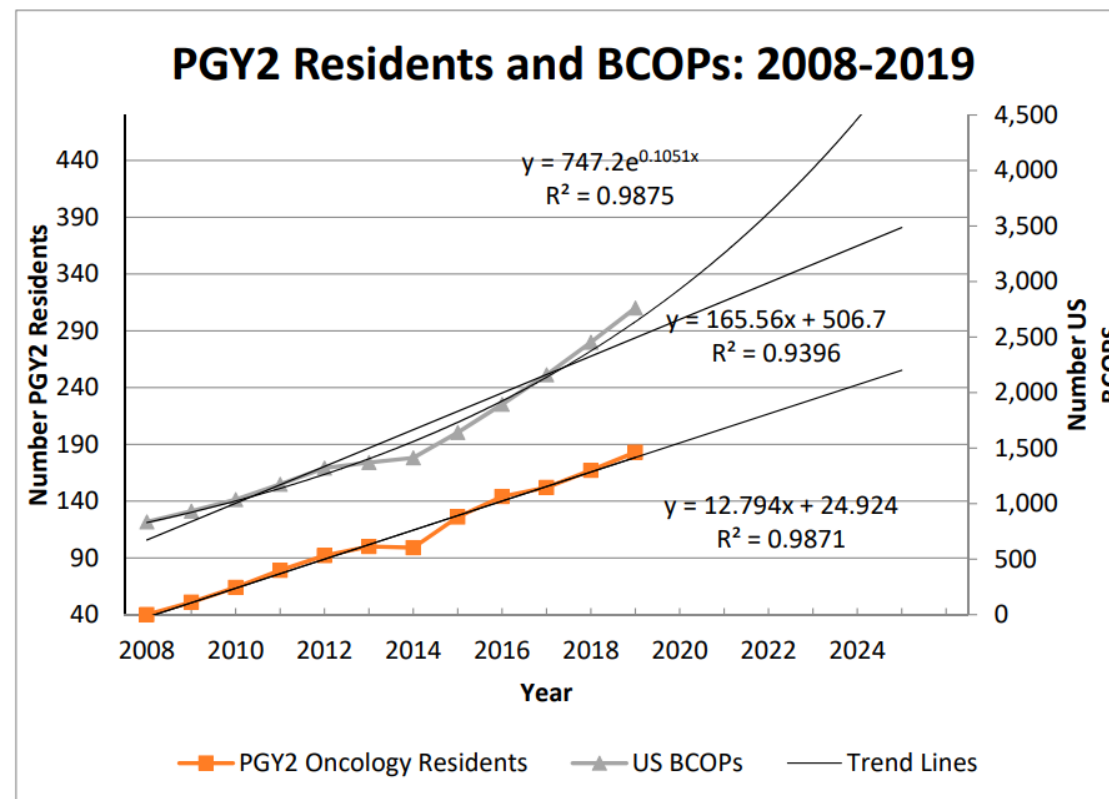
Dunn SP, et al. J Am Coll Cardiology.2015;66(19):2129-2139.

Knapp K and Ignoffo R. Pharmacy 2020;8(1):43.



Clinical Pharmacist Role

- The growing number of BCOP pharmacists could mitigate the needs of the larger oncology care workforce but also increase workload
- Well-being initiatives should be incorporated throughout all career stages





Hematology/Oncology Pharmacists Survey - 2020

- 61.8% of hematology-oncology pharmacists (n=614) reported high levels of burnout
- Pharmacists with burnout were more likely to report a major medication error in the past 3 months and an intent to leave their current position within 2 years
- Several risk factors were identified including increasing age, working hours, and administration hours

TABLE 2. Multivariable Analysis of Factors Associated With Burnout

Variable	OR (95% CI)	P
Are concerned they made a major medication error in the past 3 months (yes v no)	4.07 (2.25 to 7.35)	< .001
With respect to programs to improve your wellness		
I know how to access a wellness program	Reference	
I have accessed a wellness program	1.11 (0.70 to 1.76)	.67
I am not aware of any wellness programs	2.40 (1.46 to 3.96)	< .001



Poll Question #5

I am feeling burned out

- Yes
- No



Poll Question #6

I use resources from _____ to learn about well-being in pharmacy



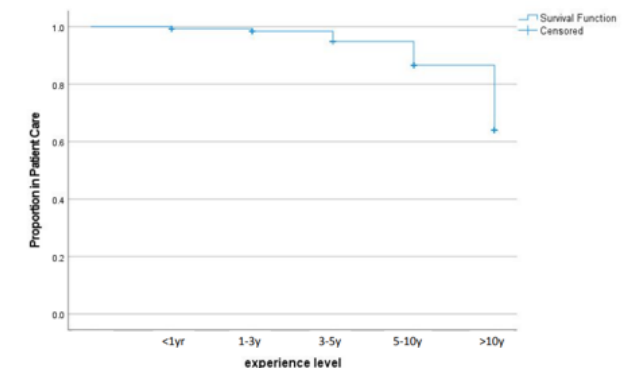
Oncology Pharmacy Workforce Survey - 2021

- Of 573 respondents
 - 78% were satisfied or very satisfied in their current role
 - 60% indicated that they were either actively considering or open to alternate careers

	Satisfaction	Attrition
Patient Care vs. Non-Patient Care	P=0.02	P=0.026
% Dedication to Patient care	P=0.006	P=0.097
Environment	P=0.48	P=0.045

Plotting the Survival of Oncology Clinical Pharmacists

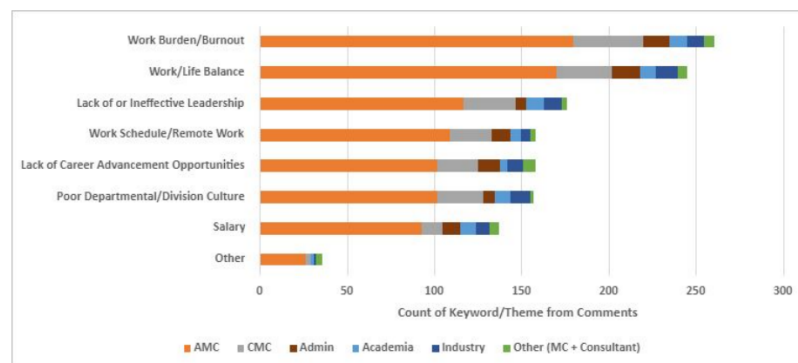
- Mapping the trend shows that
 - Risk begins to emerge at 3 years
 - Picks up steam at 5 years
 - Falls off the cliff at 10 years





Oncology Pharmacy Workforce Survey - 2021

Results: Reasons for Attrition Risk



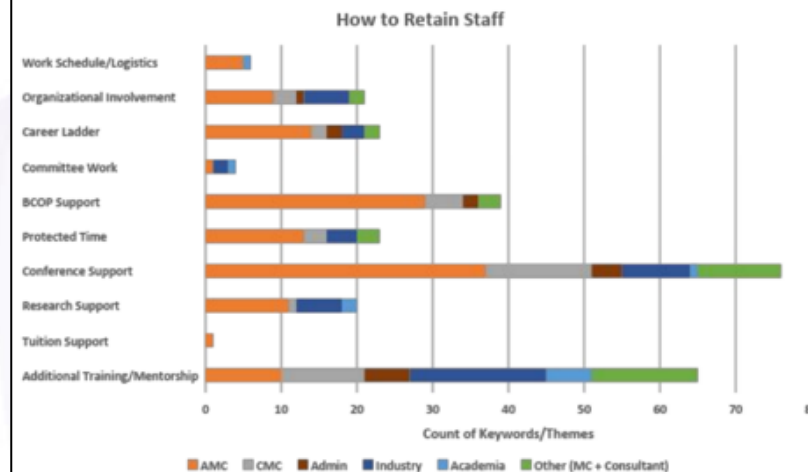
Top reasons for attrition risk varied amongst work environments

No sector cited pay as the primary reason for attrition

Burnout and balance prevailed as top contributors

"We need...better working hours working in a respectful culture, adequate resources for administrative tasks, managers that work clinically to see what is happening"

What it Takes to Retain Staff



• Affinitized comments show the importance of **support for professional development, additional training, and protected time** to engage in activities outside core business



Oncology Pharmacy Workforce Survey - 2021

- We need to **Advocate**, **Recognize** and **Support** our pharmacists from an institutional and organizational level to engage and retain the workforce

Advocate	Recognize	Support
<ul style="list-style-type: none">• Provider status• Board certification• Role transparency	<ul style="list-style-type: none">• Networking• Opportunities for connection/perspective	<ul style="list-style-type: none">• Markers of productivity• Professional development



Challenges

- COVID-19 practice model changes
- Increasing complexity of cancer care
- Performance metrics vs. quality of care
- Administrative demands
- Mergers and consolidation of competitors



Organizational Strategies

Strategy	Examples
Acknowledge and assess the problem	<ul style="list-style-type: none"> • Use town halls, radio broadcasts, letters, interviews, and face-to-face meetings to have open/candid dialogue • Assess well-being routinely – results should be used by leadership as a key measure of organizational performance
Harness the power of leadership	<ul style="list-style-type: none"> • Select and develop leaders who listen and engage • Utilize individuals to assess the performance of their leaders • Identify motivators for meaningful work
Develop/implement targeted work unit interventions	<ul style="list-style-type: none"> • Conduct focus groups based on high opportunity units using external benchmarks
Cultivate community at work	<ul style="list-style-type: none"> • Dedicate space or time for colleagues to connect



Organizational Strategies

Strategy	Examples
Use rewards and incentives wisely	<ul style="list-style-type: none"> Balance compensation methods (productivity, flexibility, protected time) to facilitate long-term sustainability
Align values and strengthen culture	<ul style="list-style-type: none"> Survey staff periodically to determine whether actions and values are aligned Communicate guiding principles to establish a common goal
Promote flexibility and work-life integration	<ul style="list-style-type: none"> Adjust/tailor work professional work effort where possible
Provide resources to promote resilience and self-care	<ul style="list-style-type: none"> Offer individual strategies that align as part of a broader strategy on an organizational level
Facilitate and fund organizational science	<ul style="list-style-type: none"> Develop analytics and research studies to provide evidence/support for interventions



Cost of Burnout Calculator

- Available via worksheet and online
- Input data needed to calculate ROI
 - N: Number of providers
 - BO: Rate of burnout
 - TO: Turnover rate per year
 - C: Cost of turnover per provider
 - CB: Estimated cost of turnover due to physician burnout
 - CI: Cost of intervention per year
 - R: Relative reduction in BO

Example Using N = 450; BO = 50%; TO = 7.5%; C = \$500 000

- A. TO without burnout:
 $0.075 = [TO \text{ without burnout} \times (1 - 0.5)] + [(2 \times TO \text{ without burnout}) \times 0.5]$
 or $0.075 / (1 + 0.5) = 5\%$
- B. No. of physicians turning over due to burnout per year:
 $(0.075 - 0.05) \times 450 = 11.25$
- C. Projected cost of physician turnover per year due to burnout:
 $\$500\,000 \times 11.25 = \$5\,625\,000$

^a National mean, approximately 54%.

^b National mean, approximately 7%.

^c Mean cost of \$500 000 to \$1 000 000 per physician.

^d Assumes that burned out physicians are approximately 2 times as likely to turn over as non-burned out physicians.

Example Using CB = \$5 625 000; CI = \$1 000 000; R = 20%

- A. Savings due to reduced BO:
 $\$5\,625\,000 \times 0.20 = \$1\,125\,000$
- B. ROI:
 $(\$1\,125\,000 - \$1\,000\,000) / \$1\,000\,000 = 12.5\%$



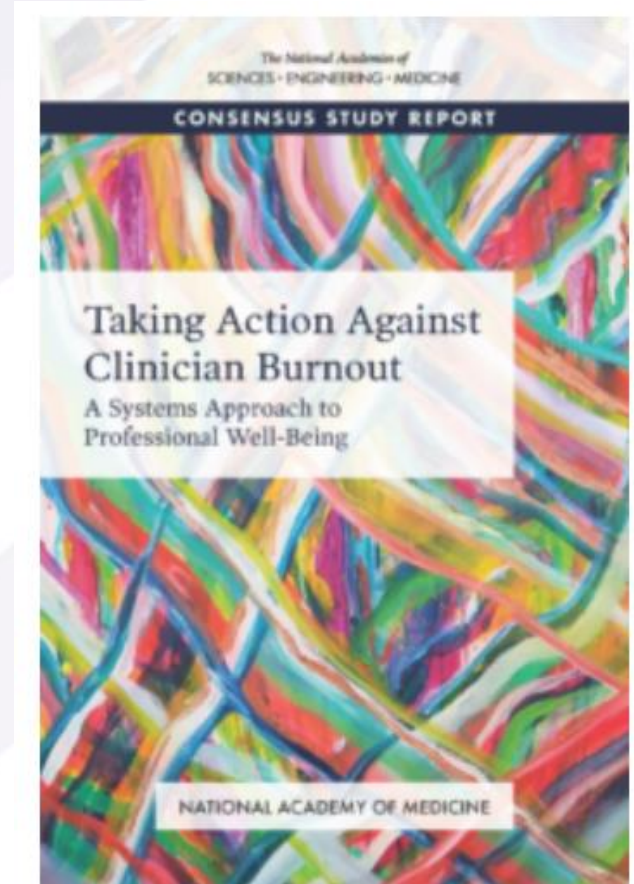
Implementation of Well-Being Initiatives

- A system-wide well-being program can create a structure to collect, implement, and continuously improve well-being across pharmacy staff
- One system surveyed 49% of invited pharmacists (137/278) in November 2020 and 41% (116/283) in June 2021 with improvements in mean (SD) Well-Being Index scores from 2.06 (2.47) to 1.52 (2.49)
- Key elements noted for a successful program include support from pharmacy and hospital leadership, diverse representation by pharmacy employees, and a committee to oversee interventions



ASHP and NAM

- ASHP has sponsored the NAM Action Collaborative of Clinician Well-Being and Resilience since 2017
- Developed a consensus report to include system-level goals and recommendations to reduce burnout which received the James A. Hamilton Book of the Year Award
- NAM's National Plan for Health Workforce Well-Being involved more than 200 organizations over six years



National Academies of Sciences, Engineering, and Medicine; National Academy of Medicine; Committee on Systems Approaches to Improve Patient Care by Supporting Clinician Well-Being. Washington (DC): National Academies Press; 2019 Oct 23.



Pharmacist Workforce Well-Being and Resilience

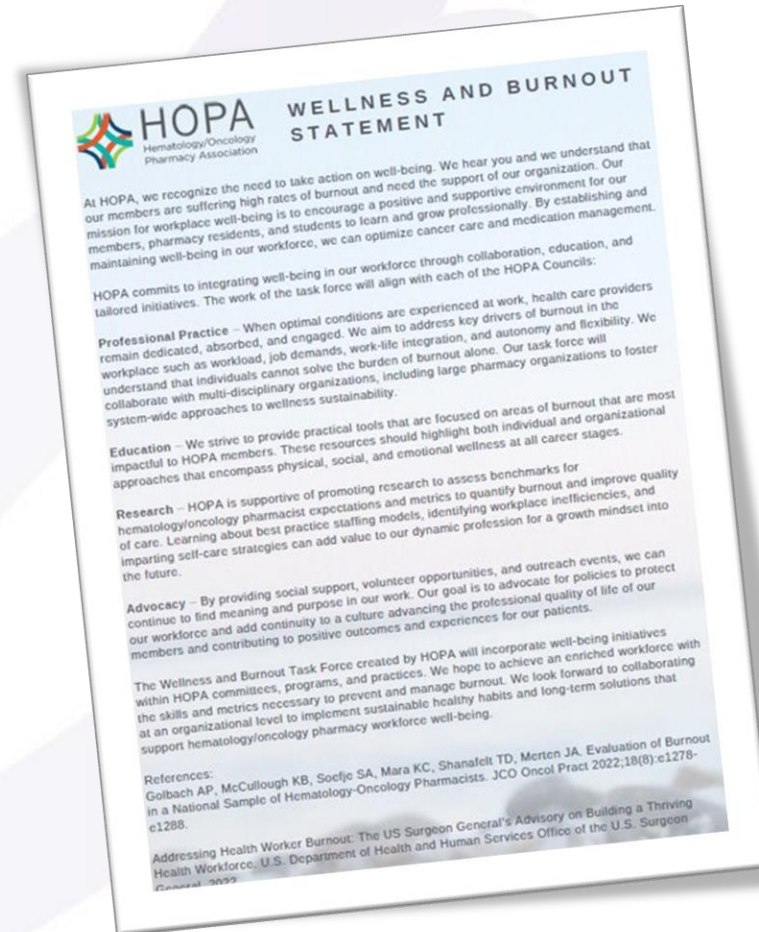
- 2019 National Consensus Conference to support actionable change
- 50 total recommendations in critical areas:
 - Pharmacist work conditions and patient safety
 - Payment models
 - Relations between pharmacists and employers
 - Pharmacist and student pharmacist well-being
 - Well-being education and training
 - Communications
 - Data, information, and research on pharmacist well-being





HOPA Wellness and Burnout Task Force

- Well-Being for HOPA Members Webpage
- Wellness Toolkit
 - Resources based on stage of career
 - Real-time Wellness Forum
- Wellness Roadmap
- Collaborations White Paper
 - To include: ISOPP, ASTCT, ATOPP, ACCP, NCODA

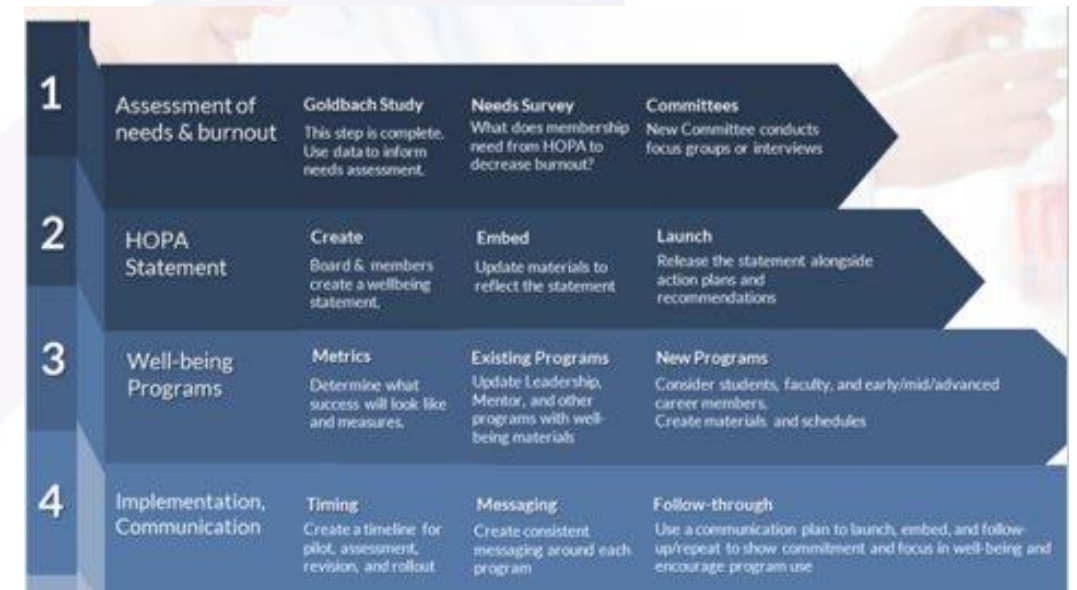
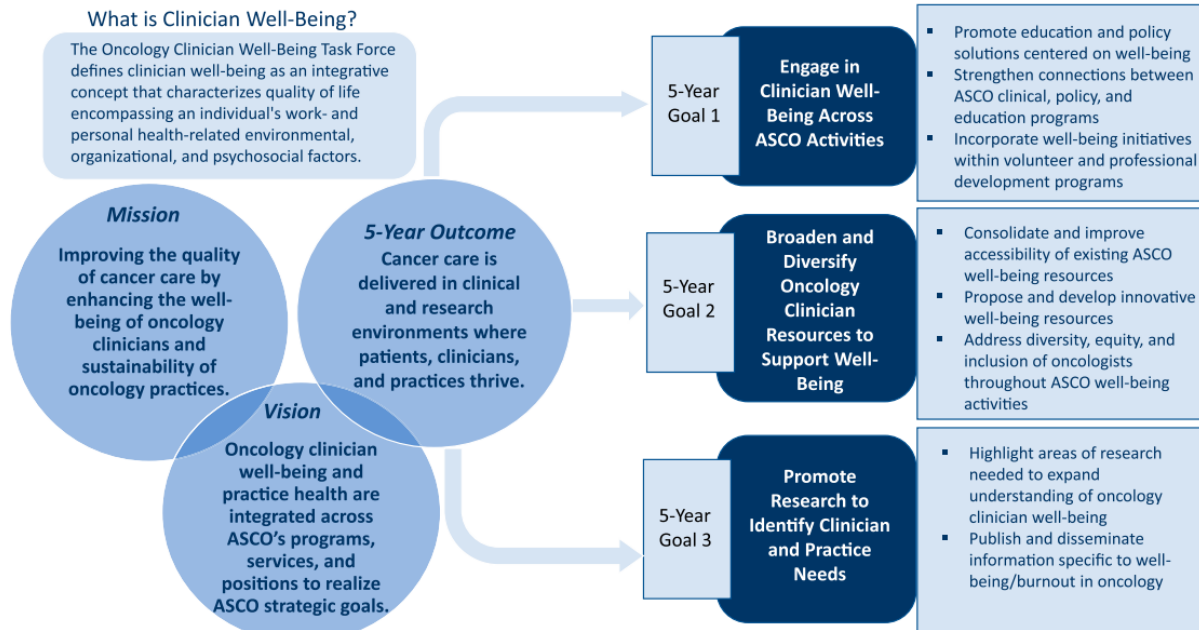


Well-Being at HOPA, <https://www.hoparx.org/about/well-being-at-hopa>. Accessed 15 February 2023.



Example Road Maps

ASCO Oncology Clinician Well-Being Task Force Roadmap



Hlubocky FJ, et al. Am Soc Clin Oncol Educ Book 2021;41:e339-e353.

Collins K and Coburn-Litvak P. Preventing Burnout and Promoting Wellbeing. Recommendations for: HOPA. Rebound 2021.



HOPA and ISOPP Collaborations

- HOPA President: Heidi Finnes, PharmD, BCOP, FHOPA
- HOPA Wellness and Burnout Task Force Vice Chair: Kate Reichert, PharmD, BCPPS
- ISOPP President: Evelyn Handel, PharmD, BCOP, BCPS
- ISOPP Task Force Representative/Research Committee Chair: Jennifer Jupp, BScPharm, BCOP



HOPA and ISOPP Collaborations

- 2020 collaboration
 - “Impact of coronavirus of 2019 on the delivery of pharmacy services to patients with cancer: An international survey of oncology pharmacy practitioners”
- Well-being initiatives
 - Representation on HOPA Wellness and Burnout Task Force
 - Gather feedback from members to guide actionable items
 - Future Collaborations White Paper



Resources

[HOPA - Well-Being at HOPA](#)

[ASCO - Recognizing Burnout & Promoting Well-Being](#)

[APhA - Well-Being Resilience Report](#)

[ASHP - Well-Being Resources](#)

[AMA - How to Address Physician Burnout and Well-Being](#)

[ACP - Individual Physician Wellness and Burnout Tools](#)

[NAM - Clinician Well-Being Knowledge Hub](#)



Poll Question #7

What would you like ISOPP to focus on next for wellness?



Summary

- Burnout can have detrimental effects leading to decreased quality of care, patient safety, and provider/patient dissatisfaction
- Hematology/oncology pharmacist burnout is highly prevalent
- Well-being initiatives beyond individual needs are necessary for a sustainable workforce
- Pharmacy organizations will continue to develop strategies to mitigate burnout and optimize cancer care



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 - Jason Yeh, PharmD, BCOP



Poll Question #8 - Open Discussion

What is working well for wellness and preventing burnout for you and/or your organization?



Burnout and Wellness in Hematology/Oncology Pharmacy

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