Team-Based Care through Interprofessional Practice and Education

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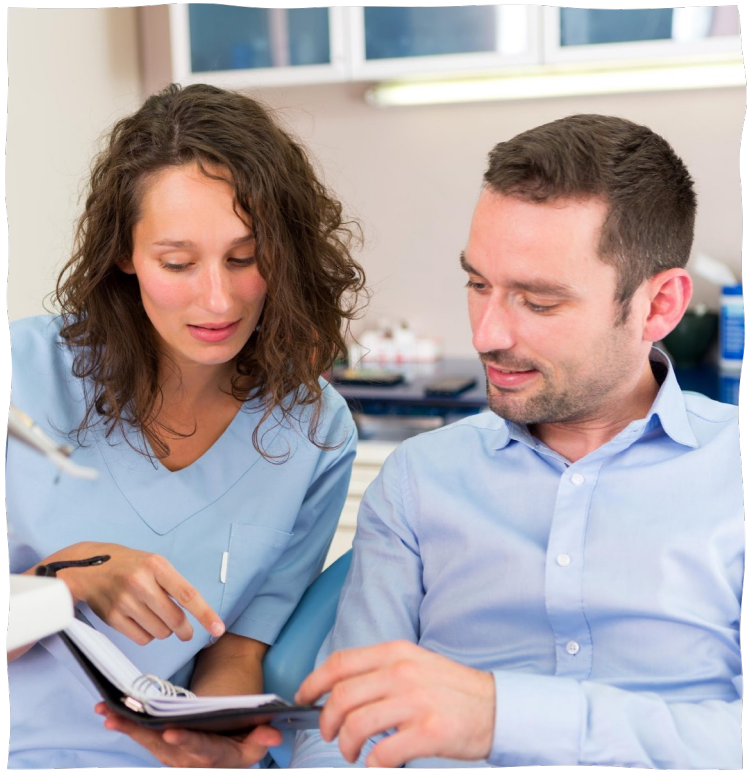
My interprofessional practice and education journey….

This Talk on One Slide

- Physician culture (OVER)emphasizes personal responsibility.
- In spite of 20+ years and billions of dollars invested, US healthcare is “Still Not Safe.”
- Evidence is clear that effective interprofessional teamwork can positively impact the Quadruple Aim.
- Physicians do occupy a unique position in the healthcare system - and have a unique opportunity and responsibility to lead culture change in the healthcare workplace.
- It is time to move from Industrial Era systems to the era of Knowledge Based Leadership to transform health education and delivery to achieve the outcomes that matter.

Why Interprofessional Education and Collaborative Practice? Why Now?

Our Founding Myth: The Physician As Solo Practitioner



How Physicians Work Today

The New IPE: Interprofessional Practice and Education

WHO: IPE is an experience that “occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve **health outcomes**" **(WHO, 2010).**

National Center adopted and *adapted* the WHO Definition:

“two or more professions **learn about, from, and with** each other to **enable effective collaboration** and improve **health outcomes**“

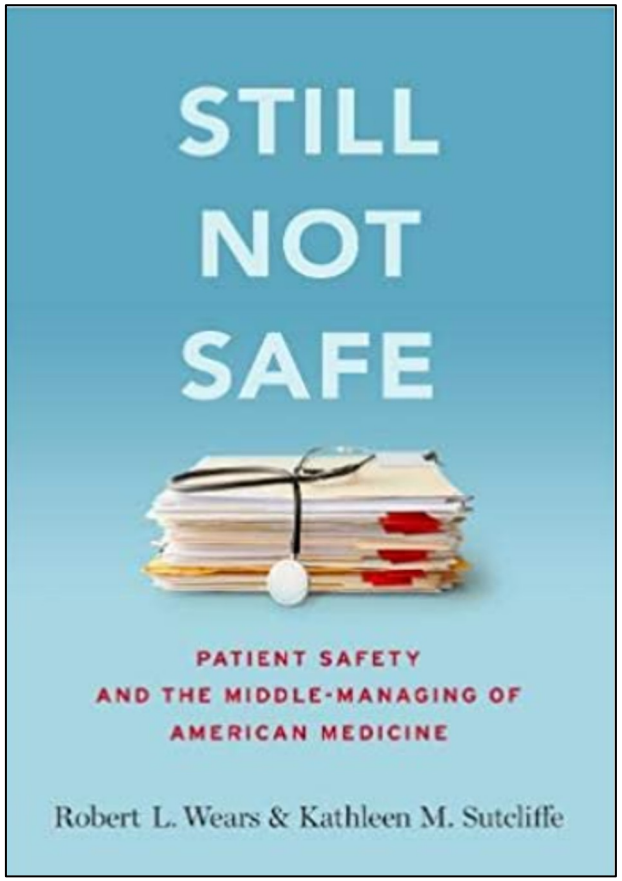
The IPE Flip: New models of interprofessional academic-community and academic-health system partnerships to truly fulfill the definition.

And We Mean HEALTH

A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

https://www.who.int/about/governance/constitution

2019: The Harsh Reality: Our Healthcare System Is Still Not Safe



- **"Scientific-bureaucratic cabal"**
- **"Technical rationality"**
- **Operating a "sort of delusional clarity"**
- **Left to clinician- and non-clinician managers who operate on a "measure and manage" mentality**
- **Contrasts with freeing frontline, self-regulating health professionals to use their clinical judgment in specific practice situations every day**
- **Does not take into consideration: social culture, wider history, external drivers, political realities, and institutional contexts**
- **The true experts who were working on the patient safety issues in the 1990s have been crowded out of the table: psychologists, engineers, human factors experts, etc.**

Wears R & Sutcliffe K (2019) **Still Not Safe: Patient Safety and the Middle-Managing of American Medicine,** Oxford University Press, Oxford, UK. ISBN: 9780190271268.

2023: The Harsh Reality: Still Not Safe

Improvements in Hospital Adverse Event Rates
Achieving Statistically Significant and Clinically Meaningful Results

William V. Padula, PhD; Peter J. Pronovost, MD, PhD

Despite 22 years to address the issues about patient safety revealed by *To Err Is Human*, iatrogenic injury remains an important cause of morbidity and mortality among hospitalized patients. These adverse outcomes do not result from physicians and other clinicians intentionally harming patients, but reflect systematic failures, including insufficient investment in research and metrics, lack of safety technology innovations, limited infrastructure to deliver high-quality care, and inconsistent adherence to clinical practice guidelines.

Multimedia

Related article page 173

From 2010 through 2019, total adverse events per 1000 patients declined as follows: from 218 to 139 for acute myocardial infarction; from 168 to 116 for heart failure; from 195 to 119 for pneumonia; and from 204 to 130 for major surgical procedures. From 2012 through 2019, total adverse events per 1000 patients for all other conditions remained unchanged at 70 adverse events. After adjustment for patient and hospital characteristics, the annual changes represented by relative risk were as follows: 0.94 (95% CI, 0.93-0.94) for acute myocardial infarction; 0.95 (95% CI, 0.94-0.96) for heart failure; 0.94 (95% CI, 0.93-0.95) for pneumonia; 0.93 (95% CI, 0.92-0.94) for major surgical procedures; and 0.97 (95% CI, 0.96-0.99) for all other conditions.

1. Eldridge et. al. (2022) Trends in adverse event rates in hospitalized patients, 2010-2019. JAMA. 328(2):173-183. doi:10.1001/jama.2022.9600
2. Padula WV and Provonost PJ (2022) Improvements in hospital adverse event rates: Achieving statistically significant and clinically meaningful results. JAMA. 328(2):148-150.

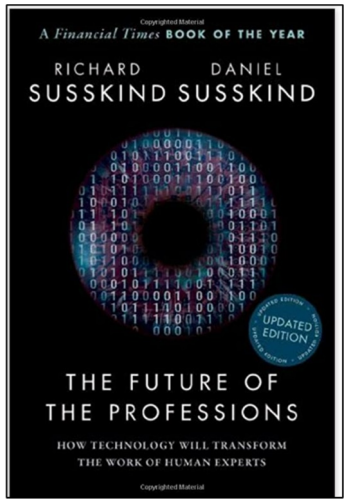
A New Clarion Call –
Serious Persistent Consequences

- 2018: 25% of hospitalized Medicare patients experienced harms
- 2019: U.S. expenditures on health care quality - $282 BILLION
- 2019: Cost of 1% reduction= $47 BILLION for one year to fix a 1999 problem estimated as $17 BILLION
- Recommend: System designers and integrators to teach clinicians how to design their environment with the goal of **ZERO HARM**

Or….What some health system leaders may be thinking…

We don’t need professionals and their competencies (including physicians) - we have a severe workforce shortage. Instead, let’s:

- Drive more standardization and top-down strategies
- Hire a << worker or person>>. They have life experience and can do the job.
- Buy a digital <<name the problem>> solution.



Responsibility

- Health professionals – especially physicians – have a very strong sense of responsibility.
- For physicians, this may be exacerbated by a sense that the livelihood of the whole team is dependent on what we bill under our license.
- AND that we bear the largest burden of malpractice.

But Our Strong Sense of Responsibility May Be Killing Us….

- 63% Burnout Rate 2021, up from 38.2% in 2020[1]
- Depression: 52.6% 2021, 49.5% 2020[1]
- 33% plan to reduce hours; 20% plan to leave the profession
- Standardized mortality rate (SMR) for suicide is 1.44; for women 1.9[3]

1. Shanafelt et. al. (2022) Mayo Clinic Proc; 97(12): P2248-P2258)
2. Sinsky et. al. (2021) Mayo Clinic Proc: Innov & Qual Outcomes; 5(6): 1165-1173.
3. Dutheil et. al. (2019) PLOS ONE https://doi.org/10.1371/journal.pone.0226361

And by the way –
THE REST OF THE WORKFORCE IS IN CRISIS TOO!

The Gordian Knot

There was a country that had no legitimate king. An oracle decreed that the next man to enter the city with an ox-cart should become king. A poor peasant named Gordius arrived in the public square with his wife, an ox-cart and, indeed, he was declared King. In gratitude to the gods, he dedicated his ox-cart to Zeus, tying it to a post with a highly intricate knot, later known as a Gordian Knot. Another oracle foretold that the person who untied the knot would rule all of Asia.

People came and went from the city for centuries and no one was able to loosen the knot. Then in the 4th Century B.C. a young man approached the ox-cart, but could find no loose end to unbind the knot. He took his sword and unfastened the knot by slicing it in half. That young man was later known as Alexander the Great. But all did not end well for him...

https://amdphd.com/the-legend-of-the-gordian-knot#:~:text=Greek%20Legend%20of%20the%20Gordian%20Knot&text=A%20poor%20peasant%20named%20Gordius,known%20as%20a%20Gordian%20Knot.

The Gordian Knot of Interprofessional Education and Collaborative Practice

- “Medicine has often been portrayed as problematic in creating interprofessional innovation and implementation to address increasing complex challenges in team-based health care.”
- “Medicine has the power to shift the conversation by creating interprofessional leadership roles….The real and perceived slights felt by other professions are important to acknowledge and address, but not to the detriment of the recognition of the capacity of medicine to both lead and follow in the creation of sustainable interprofessional practice.”

Brandt, Kitto and Cervero (2018) Untying the interprofessional Gordian Knot: The National Collaborative for Improving the Clinical Learning Environment, Academic Medicine; 93:1437-1440. doi: 10.1097/ACM.0000000000002313

Untying the Gordian Knot

1. Recognize and acknowledge the impact of professional cultures, and move to a focus on the shared mission of patients, families and communities to drive different conversations about cultural change in health care and education.

Brandt, Kitto and Cervero (2018) *Academic Medicine*.

Untying the Gordian Knot

2. Recognize that existing health professions cultures may be barriers to patient-centered interprofessional care, and that technical/ structural solutions will not in and of themselves solve intergroup and interinstitutional barriers to collaboration without deep understanding of the cultures.

Brandt, Kitto and Cervero (2018) *Academic Medicine.*

Untying the Gordian Knot

3. Part of this process is to take what we know already from the last few decades of interprofessional study and distill that knowledge into actionable strategies from which medicine then can take a lead (in a “first among equals” sense).

Brandt, Kitto and Cervero (2018) *Academic Medicine.*

High Reliability Organizations

Oncology Care Model

Prospective Payments

MIPS

Readmission Penalties

Bundled Payments

Primary Care First

Accountable Care Organizations

SDoH

Alternative Payment Models

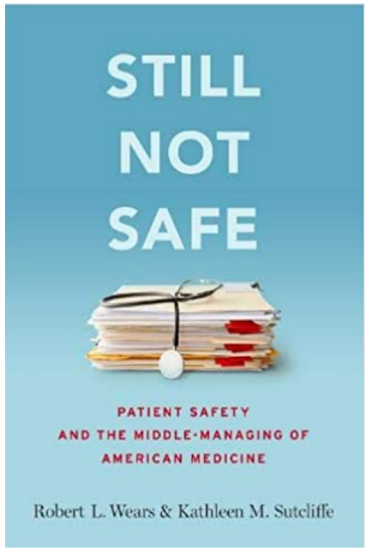
Quality Payments

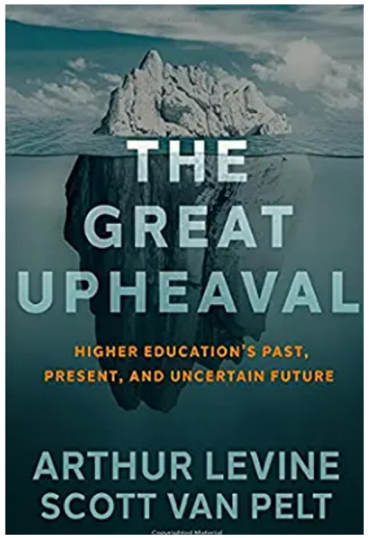
Affordable Care Act

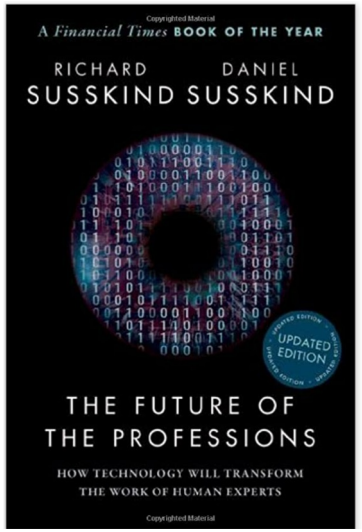
Learning Health Systems

Making Care Primary

The Industrial Era foundation of our health and education systems and Technical Rationality approach are not getting us where we need to go







Teams ALONE Will Not Solve This Crisis - But Effective Teamworking IS Part of the Solution

- Although personal factors (i.e. resilience) matter, organizational/ structural factors are far more important in predicting and mitigating burnout. (West et. al. (2018) *J Intern Med*; 283:516-529)
- Team-specific workload and full staffing correlated with lower burnout (Helfrich et. al. (2017) *JGIM*; 32(7):760-766)
- Interpersonal and cognitive-behavioral teamwork correlated with burnout and perceived patient safety (Welp et. al. (2016) *Crit Care*; 30:110)
- Staff perceptions of teamwork positively correlated with turnover (Zaheer et. al. (2019) *Human Resources for Health*; 17:66.)
- Local team support can mitigate burnout and work-related stress, but organizational culture may override the protective effect of local team culture (Kelly et. al. (2022) *Ann Fam Med* 20:57-62. and Cunningham et. al. (2022) *J Am Board Fam Med* 00:000.)

And Not JUST a Solution for the Workforce Crisis

- IPCP improved access and health outcomes for underserved HF patients (White-Williams et. al. (2022) *J Healthcare Qual.* 44:294-304)
- IP teams improve primary care outcomes (Smith et. al. (2019) *Ann Fam Med*. 17:S24-S32.)
- Increasing complexity leading to more demonstrated impact of IP teams in cancer care (Knoop et. al. (2017) *Sem in Onc Nursing*. 33:459-463.)
- Coordinated IP care improves outcomes, resource utilization and patient satisfaction in neuromuscular disease (Howard and Potts (2019) *Curr Treat Options Neurol*. 21:35)

New Mental Model

We must work on changing the underlying ideology and culture that crosses professional and institutional borders and boundaries. We need a new mental model about the professions themselves, how they work together, and how today's disparate systems function optimally together.

Barbara F. Brandt (2023) Creating a utopian future by asking uncomfortable questions. *J Interprofessional Care*, 37:sup1, S1-S3. DOI: 10.1080/13561820.2023.2194914

Moving to Interprofessional Knowledge-based Leadership

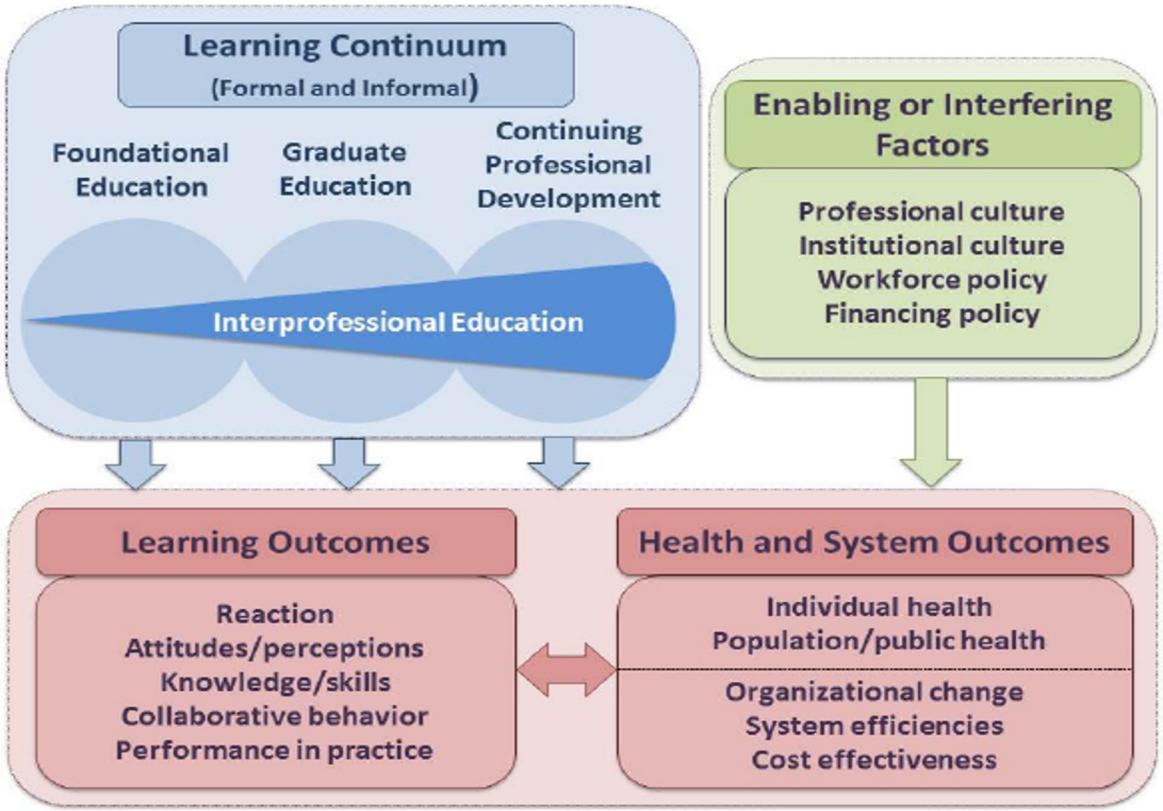
- Making sense of our past to look forward to the knowledge-based future.
- Awareness by paying attention to everyday wake-up calls.
  - Working harder will not solve our challenges.
- Sense-making with your colleagues.
  - Seeing our world through different lenses, including our professions, teams, people, and society.
- Consciousness of the impact of the Industrial Era standardization on our work to set the stage for Knowledge-based Leadership.

The Nexus of Practice and Education

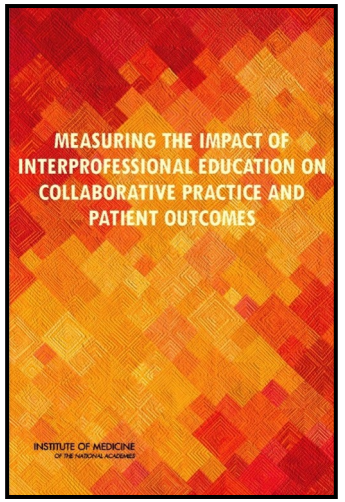
The Nexus is designed to **intentionally link** the health professions education and health systems for interprofessional workforce development of future and current health professionals to **simultaneously demonstrate** organizational, learning and health outcomes.

Theoretical Framework: IOM Model

FIGURE: The interprofessional learning continuum (IPLC) model

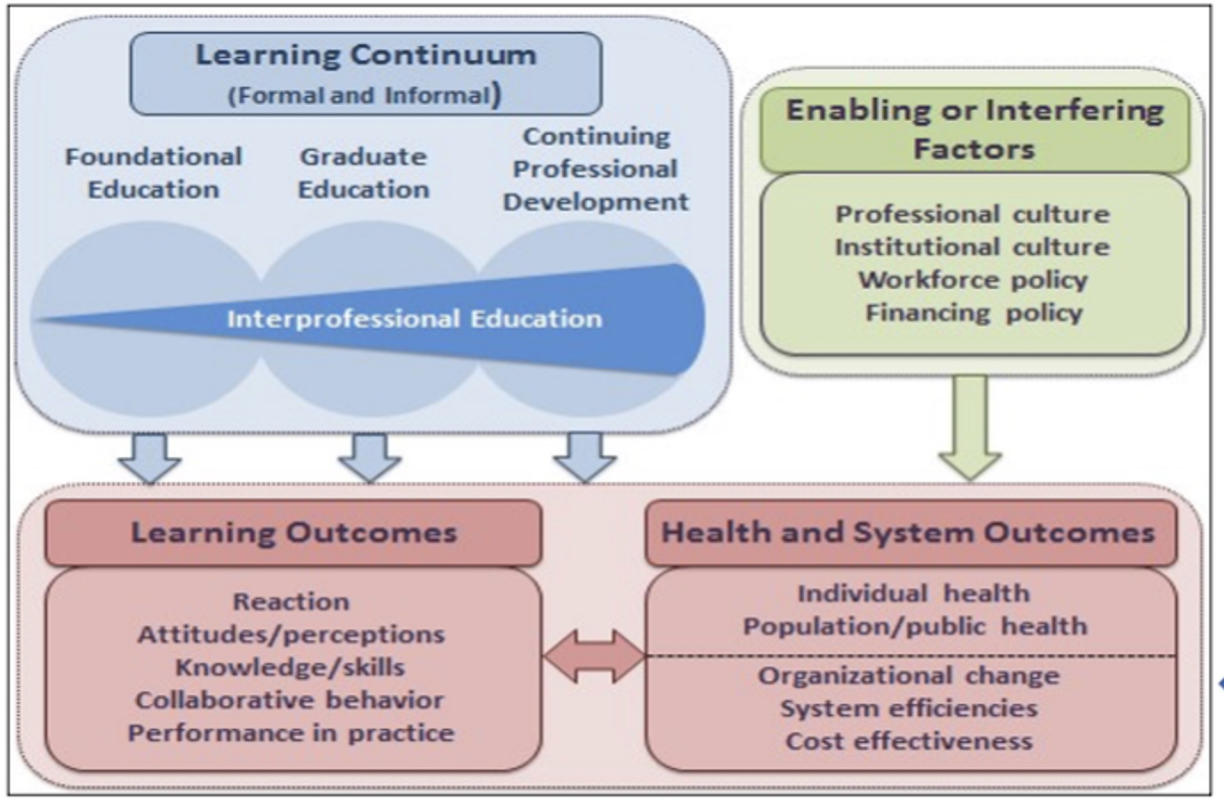


NOTE: For this model, "graduate education" encompasses any advanced formal or supervised health professions training taking place between completion of foundational education and entry into unsupervised practice.



Theoretical Framework: Institute of Medicine *Measuring the Impact of Interprofessional Education on Collaborative Practice and Patient Outcomes. 2015*

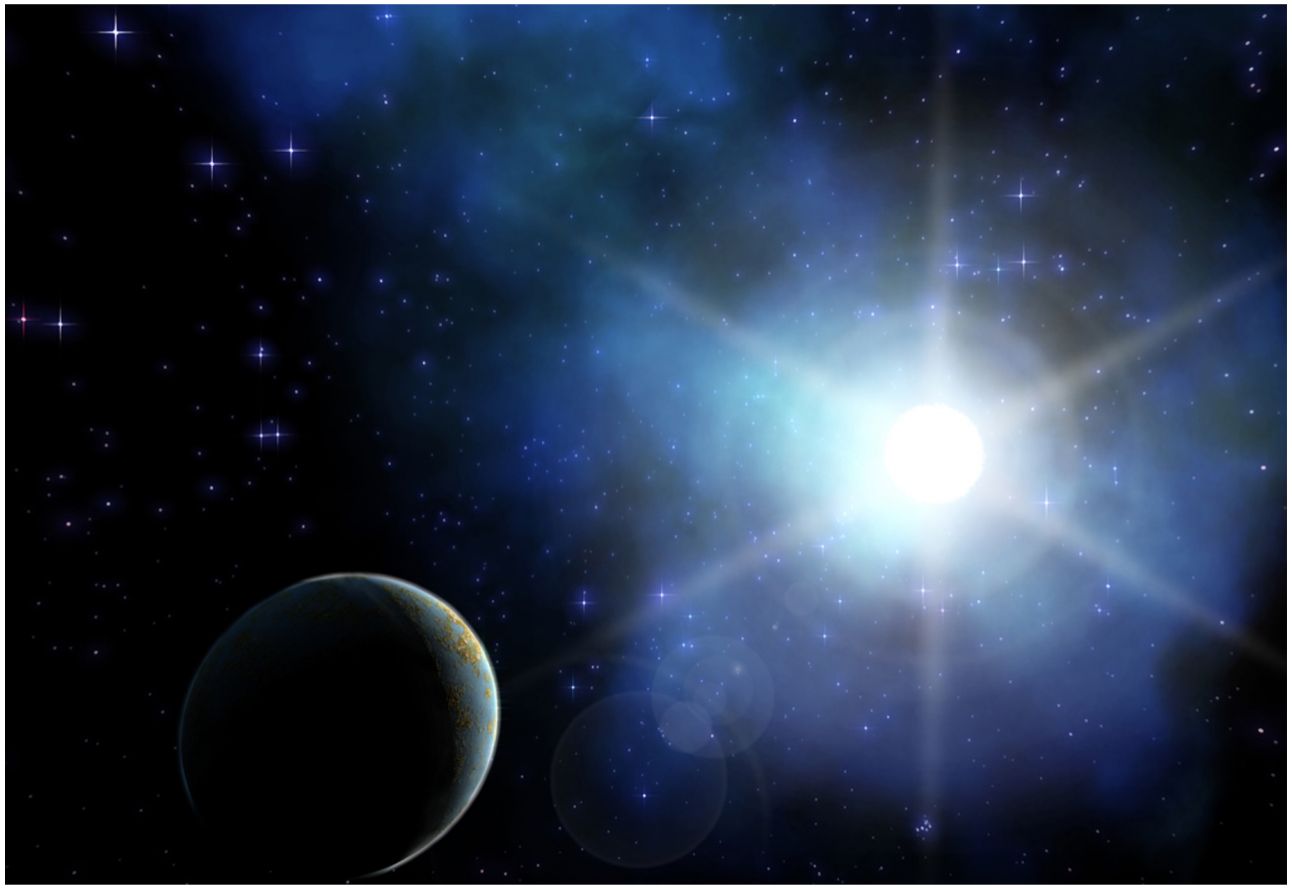
National Center Expanded Model



Then,
Given the types of learners, what are the levels of learning outcomes tobe achieved in formal curriculum and informal interactions?

Design Starts Here

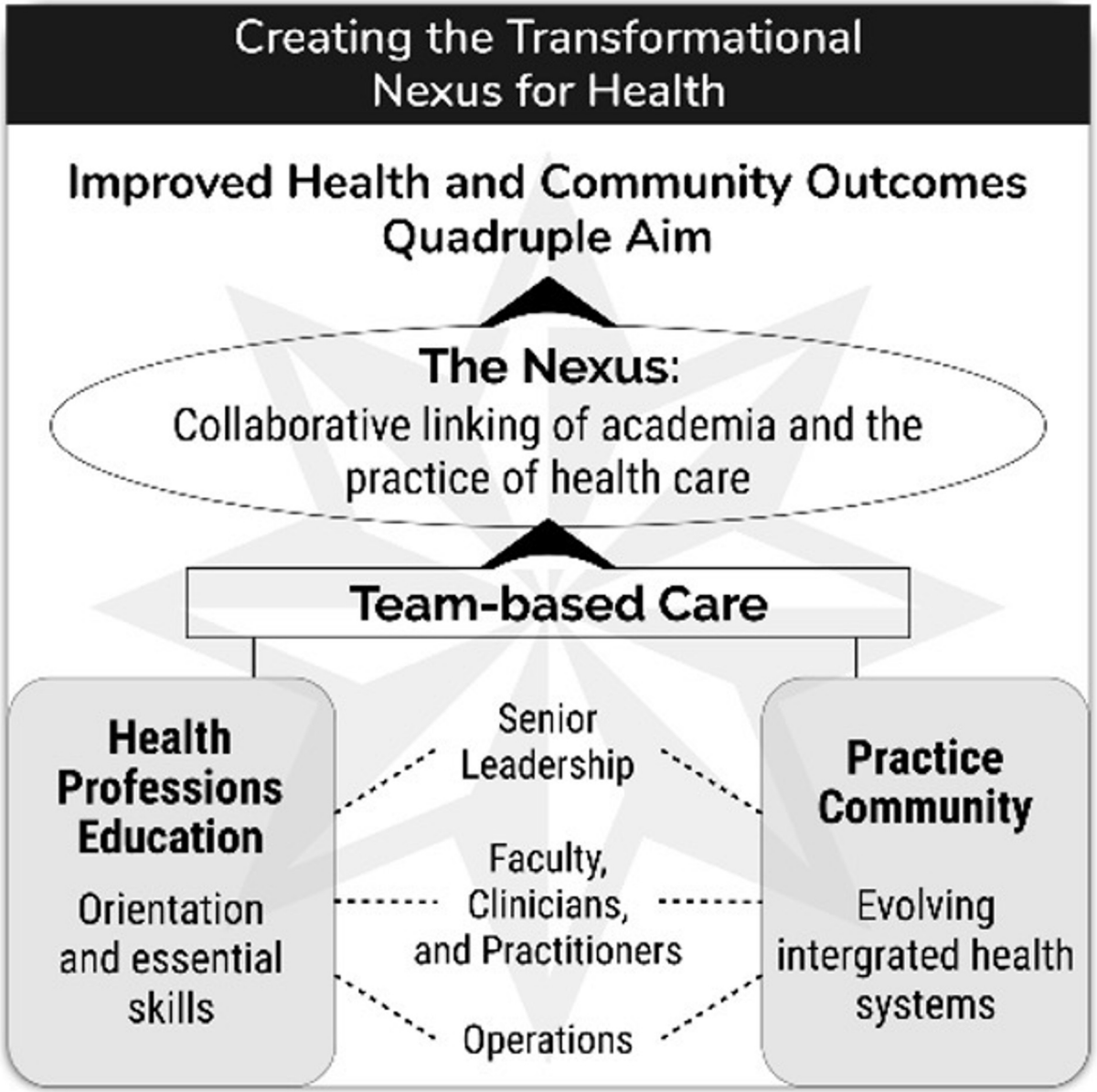
Given the specific practice/ community, what do the people served and health organizations need? What are the intended organizational, health, and wellbeing outcomes?



True North

If we are not having a positive impact on health about what matters most to those we serve – including addressing upstream factors (SDOH) and creating health equity – we have failed.

Barbara F. Brandt, Carla Dieter & Christine Arenson (2023): From the nexus vision to the NexusIPE™ learning model, Journal of Interprofessional Care, DOI: 10.1080/13561820.2023.2202223



The Nexus of Learning and Practice

Important learning occurs at the nexus of education and practice, with… team members sharing responsibility for learning and doing the work of patient-engaged interprofessional collaborative practice. IPEC and NCICLE frameworks inform didactic curriculum and simulation that prepare residents for authentic workplace learning that will improve quality, support practice transformation and drive health equity locally…

Arenson CA and Brandt BF (2021) The importance of interprofessional practice in family medicine education. *Family Medicine*; 53(x):pp-p.) doi: 10.22454/FamMed.2021.151177

Foundation

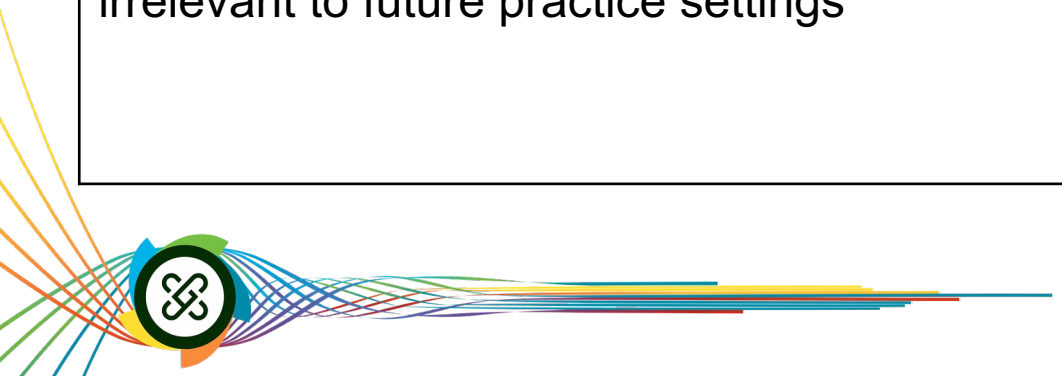
So yes, give your residents and fellows (and faculty and preceptors) some foundational exposure to core principles of interprofessional practice – and grounding in the SCIENCE OF TEAMS AND TEAMWORKING. They need the language and a solid understanding of the WHY.

Workplace Learning

- Workplace learning is increasingly recognized as important in maintaining professional competence and is defined as “predominantly unstructured, experiential, and non-institutional” occurring in everyday practice.
- Professionals observe from their practice situation to learn from it and, therefore, workplace learning is more than serendipitous by chance.

1. Marsick V and Volpe M (1999) The nature and need for informal learning, Advances in Developing Human Resources; 1(3):1-9, doi: 10.1177/152342239900100302
2. Nisbet G, Lincoln M, Dunn S (2013) Informal interprofessional learning: an untapped opportunity for learning and change within the workplace, J Interprofessional Care; 27(6):469-475, doi: 10.3109/13561820.2013.805735.
3. Regehr G and Mylopoulos M (2008) Maintaining competence in the field: learning about practice, through practice, in practice. Journal of Continuing Education in the Health Professions, 28(S1):S19-S23. DOI: 10.10020chp.203

Traditional IPE	**Workplace Learning**
Highly structured, standardized practice experiences	Prepare students for self-directed learning
Create special “IPE Clinics” to teach interprofessional collaborative practice skills separately from uniprofessional skills	Authentic practice settings and real-world teams provide the backdrop for learning uniprofessional and interprofessional skills simultaneously
Learners absorb knowledge and attitudes about other team members through the “hidden curriculum” which may be inaccurate or perpetuate stereotypes	Learners are guided toward intentional interprofessional reflection on how effective (or ineffective) teamworking impacts outcomes for patients/ clients AND the team
Interprofessional competencies may be seen as irrelevant to future practice settings	The value of interprofessional competencies, as demonstrated by the impact of effective teamworking, are demonstrated in future profession-specific practice settings



Creating Interprofessional Workplace Learning Environments

- All stakeholders learn together: patients, families, communities, populations, clinicians, faculty, residents, students. . . .

- Practice and Community as the Curriculum
  - Teamwork, collaboration, coordination and networks occur naturally (good and bad).
  - Social Justice and Health Equity: Lived experience of people served, disparities, racism, hidden hand of policy.

- Adult learning principles and skills – facilitation for understanding and learning.

Barbara F. Brandt, Carla Dieter & Christine Arenson (2023): From the nexus vision to the NexusIPE™ learning model, Journal of Interprofessional Care,

Creating Interprofessional Workplace Learning Environments

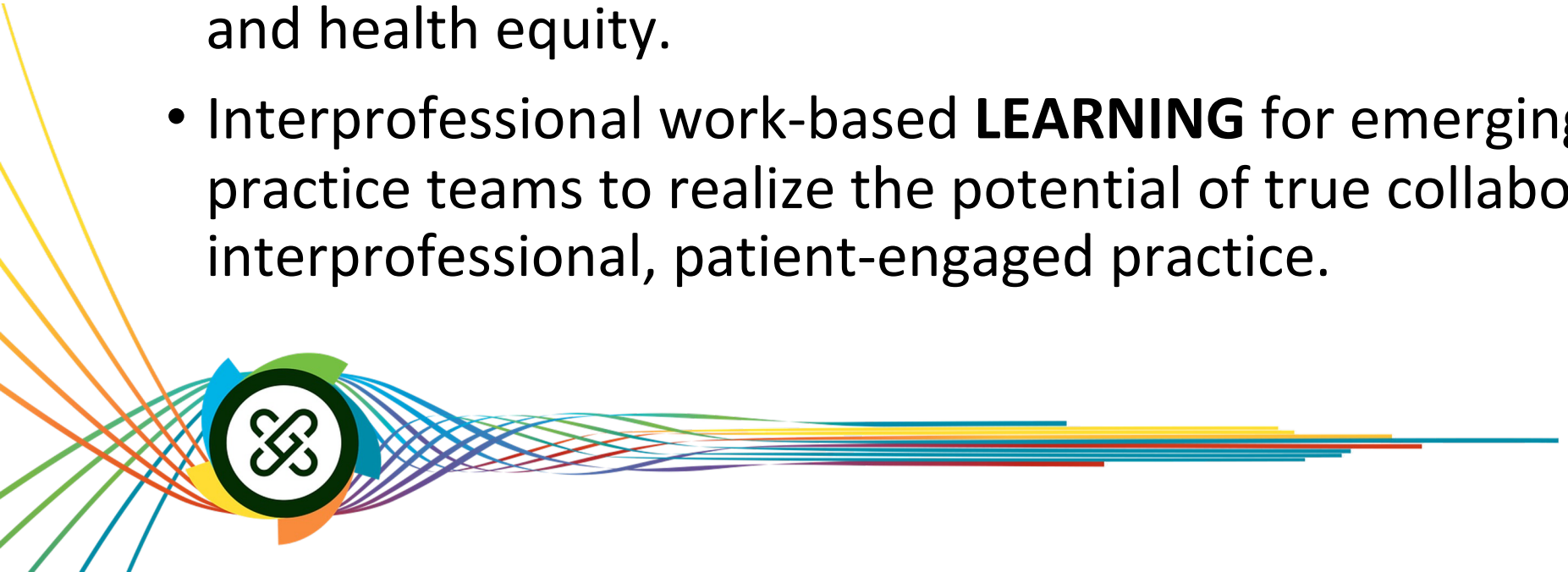
- Coaching to reinforce early curriculum – such as IPEC competencies and ways of working (teamwork, collaboration, coordination, and networking).
- Naturally occurring, lessons learned in practice: does not necessarily require hours of new curriculum, curriculum committees, faculty votes, approvals, regulations, certification, new competencies.
- It does require a commitment to people, families, communities and populations.

Supporting Active Learning in Practice: FACILITATION AND COACHING for Learning

- The Zone of Proximal Development is the point at which the learner cannot progress without outside coaching.
- We don’t need to create artificial practice environments to support learning – in fact, they are likely to be counter-productive!
- But we also can’t assume learners will “get it” without our help.
- This is where structured (ideally interprofessional) debriefing comes in….back to the classroom, to share observations and (guided by expert faculty) consider the impact of positive (and negative) examples of good teamworking skills on outcomes for those served AND members of the team (Quintuple Aim).

Critical Success Factors for Community-Engaged, Practice-Based Assessment of IPE

- Patients, families, and communities be fully engaged in the design, implementation and assessment of **CARE.**
- Interprofessional community-engaged **EVALUATION** teams to effectively study best strategies for supporting evolving interprofessional practice teams to achieve Quadruple Aim outcomes and health equity.
- Interprofessional work-based **LEARNING** for emerging/transforming practice teams to realize the potential of true collaborative interprofessional, patient-engaged practice.



This Talk on One Slide - Reprise

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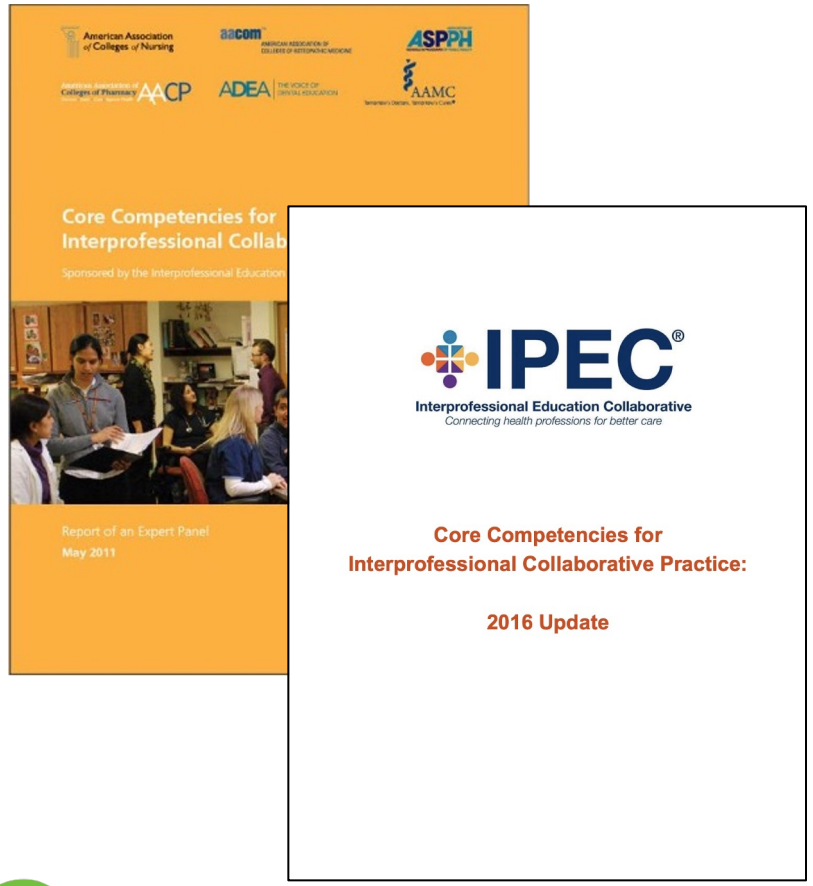
- In spite of 20+ years and billions of dollars invested, US healthcare is “Still Not Safe.”
- Evidence is clear that effective interprofessional teamwork can positively impact the Quadruple Aim.
- Physicians do occupy a unique position in the healthcare system - and have a unique opportunity and responsibility to lead culture change in the healthcare workplace.
- It is time to move from Industrial Era systems to the era of Knowledge Based Leadership to transform health education and delivery to achieve the outcomes that matter.

Core Competencies for Interprofessional Collaborative Practice



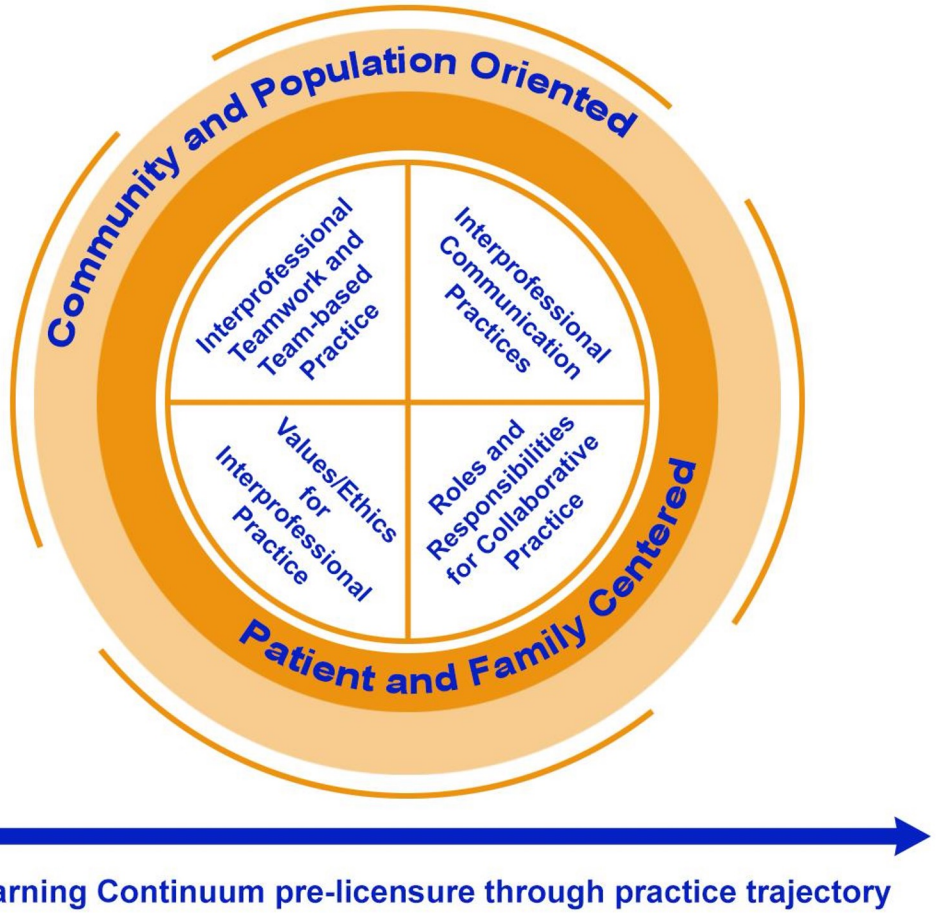


Image Adapted from: IPEC Core Competencies for Interprofessional Collaborative Practice: 2016 Update

Guidance on Developing Quality Interprofessional Education for the Health Professions

https://healthprofessionsaccreditors.org/ipe-guidance/

HPAC
Health Professions Accreditors Collaborative

NATIONAL CENTER for INTERPROFESSIONAL PRACTICE and EDUCATION

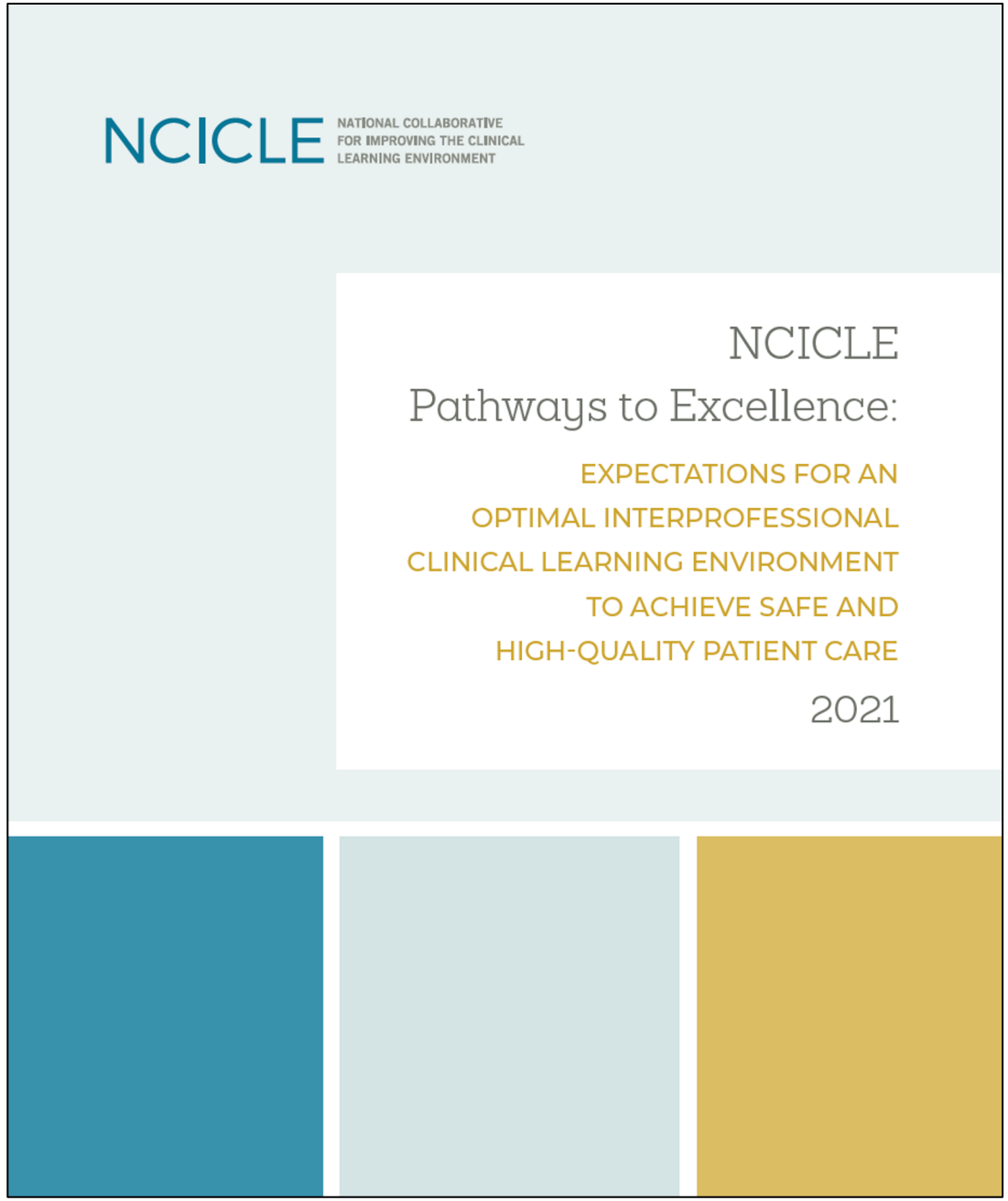
Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests and receives a consultation	Clearly and concisely requests and responds to a consultation	Verifies understanding of recommendations when providing or receiving a consultation	Coordinates recommendations from different members of the health care team to optimize patient care, resolving conflict when needed	Coaches flexible communication strategies that value input from all health care team members
Uses language that values all members of the health care team	Communicates information effectively with all health care team members	Uses active listening to adapt communication style to fit team needs	Maintains effective communication in crisis situation	
	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners	Communicates constructive feedback to superiors	Facilitates regular health care team-based feedback in complex situations
☐	☐	☐	☐	☐ ☐ ☐ ☐
Comments: Not Yet Completed Level 1 ☐				

https://www.acgme.org/globalassets/pdfs/milestones/surgerymilestones.pdf

ACGME Milestones: Interprofessional Practice Addressed by Every Specialty

The National Collaborative for Improving the Clinical Learning Environment (NCICLE) is pleased to announce a new release

www.ncicle.org



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September 18-19 and
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- Movement Moves Us
- Patient Responders
- Nexus Fair
- Nexus Award
- Moving to Action Launch Party

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