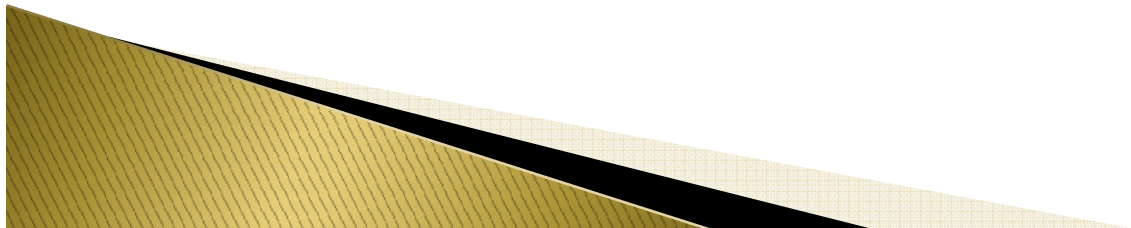


Examination of the effects of interprofessional collaboration on health care provider and team productivity: An important consideration in health human resources planning

Kelly Lackie MN PhD(c) RN
Gail Tomblin Murphy PhD RN
Dalhousie University, Canada

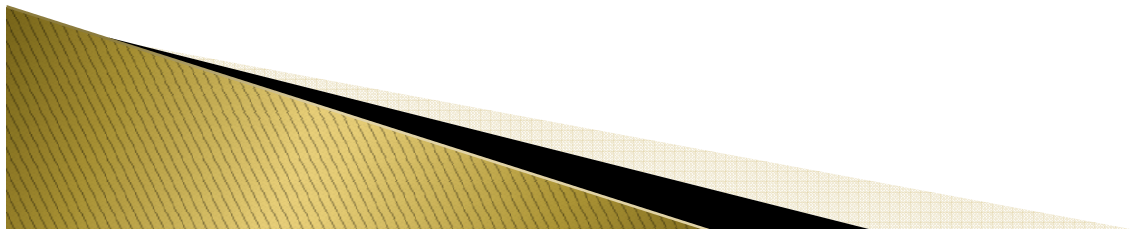


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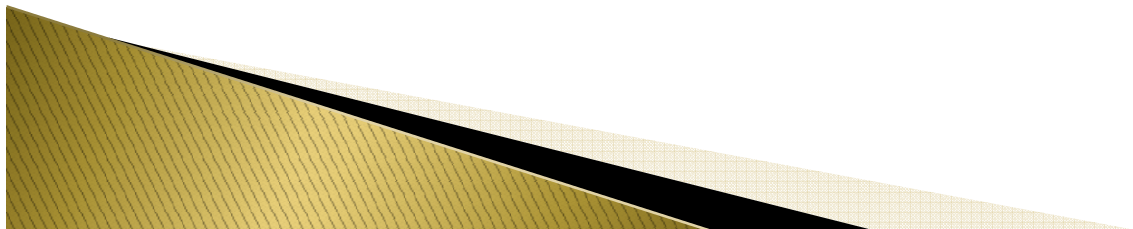
PhD Supervisory Committee

- ▶ Dr. Gail Tomblin Murphy (supervisor)
- ▶ Dr. Jean Hughes
- ▶ Dr. John Gilbert
- ▶ Dr. Rob Alder



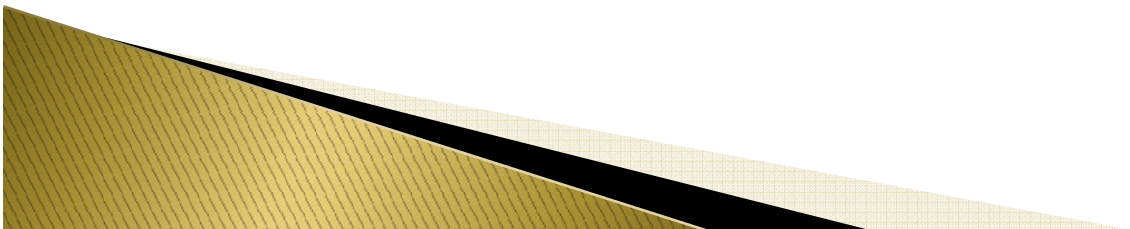
Background

- ▶ A global health human resources (HHR) crisis with shortages in all health care provider (HCP) groups is imminent.
- ▶ The requirements for HCPs should be dependent on the needs of the population and the ability to provide services to meet those needs.



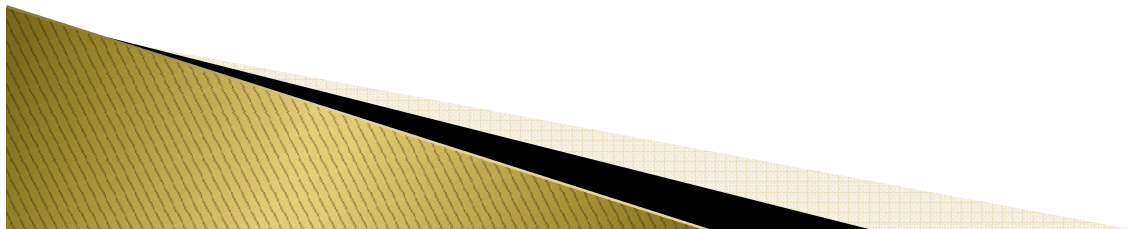
Background

- ▶ HHR planning (HHRP) is about having the *right* number of HCPs in the *right* place at the *right* time (Birch et al., 2007).
- ▶ When undertaking needs-based HHRP it is equally important to consider *how* HCPs work together and the impact that team delivered care has on workforce productivity.



Background

- ▶ Interprofessional collaboration (IPC) has been promoted as a means to enhance the quality of care and create HHR efficiencies.
- ▶ Important to establish *if* IPC occurs, the extent to which it occurs, and its effect on HCP productivity.
- ▶ No research studies could be found that specifically examined the impact of IPC on productivity, as assessed by HCPs themselves.



Study Purpose

- ▶ to discover HCPs' understandings about IPC and their perceived level of efficiency and effectiveness when working with their team;
- ▶ to determine the extent to which HCPs demonstrate the competencies that are related to IPC; and,
- ▶ to explore whether assessment of the IPC competencies changed HCPs' perceptions of being productive



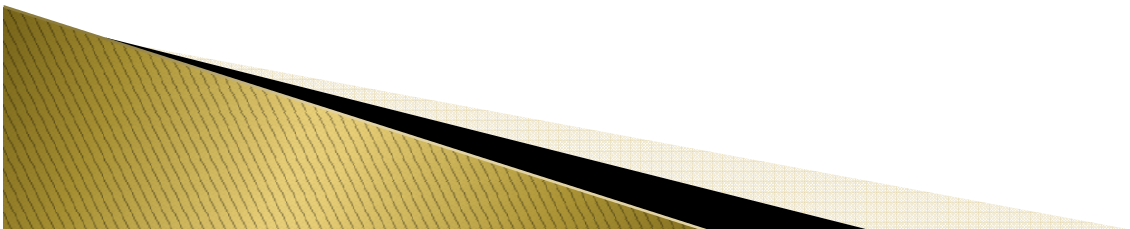
Research Questions

- 1) How do HCPs define IPC? What are HCPs' perceived level of personal and team productivity (efficiency, effectiveness) when working in a team environment?
- 2) To what extent do HCPs demonstrate performance of IPC competencies, as assessed using the Interprofessional Collaborator Assessment Rubric (ICAR)?
- 3) How did the self- and peer-IPC competency assessments change HCPs' definitions of IPC? What are HCPs' perceptions of personal and team productivity after completing the assessments?



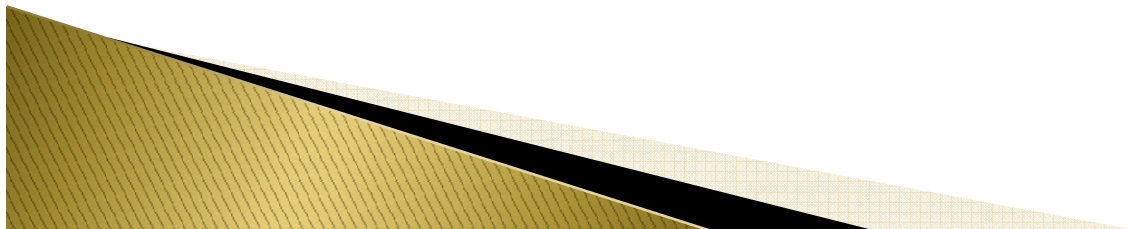
Productivity – an operational definition

The sense of being efficient and effective when **knowledge, skills and attitudes** are incorporated into practice

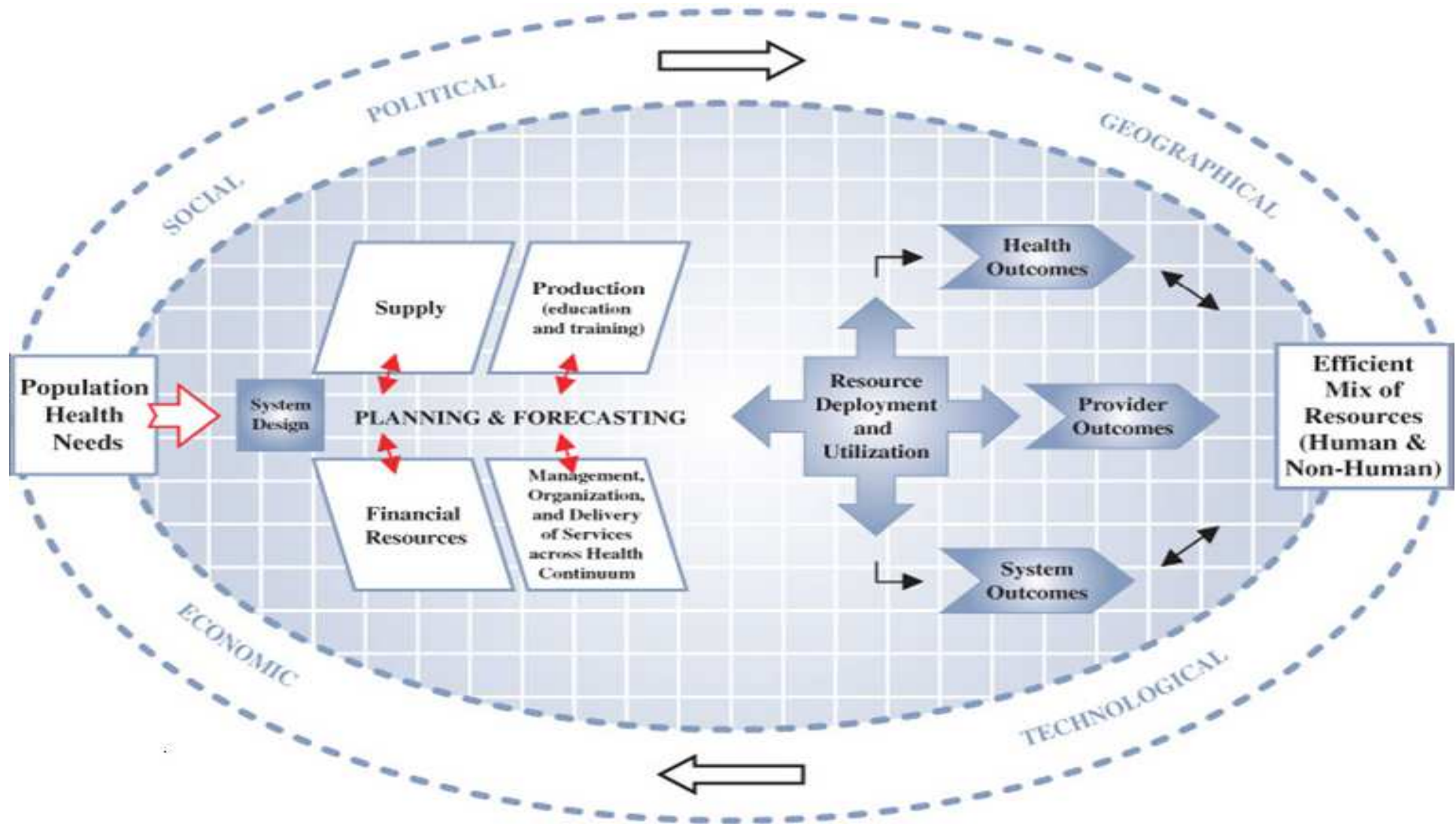


Theoretical frameworks

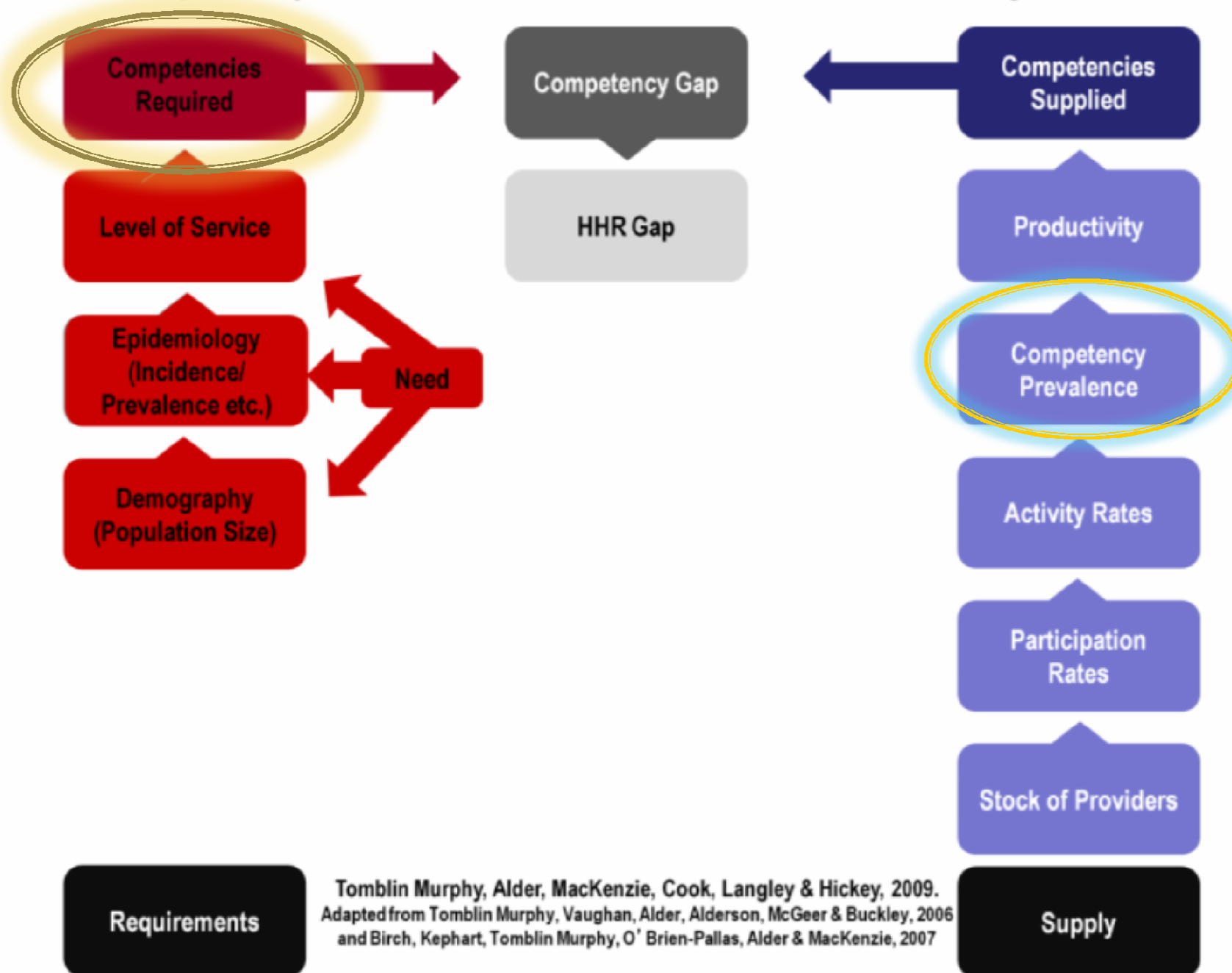
- ▶ Health System and Health Human Resources Planning Conceptual Framework (Tomblin Murphy & O'Brien-Pallas, 2006)
- ▶ Service-based HHRP framework (previously called the Competency-based HHRP framework) (Tomblin Murphy, et al., 2013).



Health System and Health Human Resources Planning Conceptual Framework



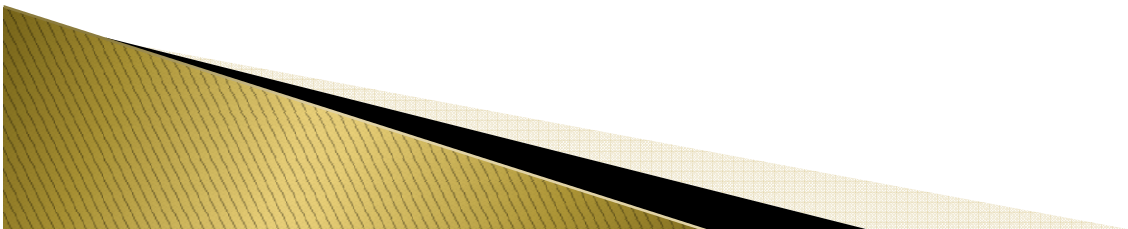
Competency-Based Health Human Resources Planning Framework



Methodology

- ▶ Embedded mixed-methods intervention study
- ▶ Pragmatic worldview
- ▶ Fixed, typology-based
- ▶ Qualitative priority
- ▶ Sequential data collection and analysis

QUAL (quan)=complementarity




Design

- ▶ Setting – Community Health Centres (CHC) throughout Nova Scotia
- ▶ Data collection:
 - ❖ qualitative strands (RQ 1&3): face-to-face interviews
 - ❖ quantitative strand (RQ 2): ICAR self-assessments
 - ❖ ICAR tool:
 - 6 competency categories R/T IPC
 - 31 behavioural indicators
 - 9-point Likert scale (< 4 = not performing; ≥ 5 = performing; N/O = not observed)



Participant Demographics

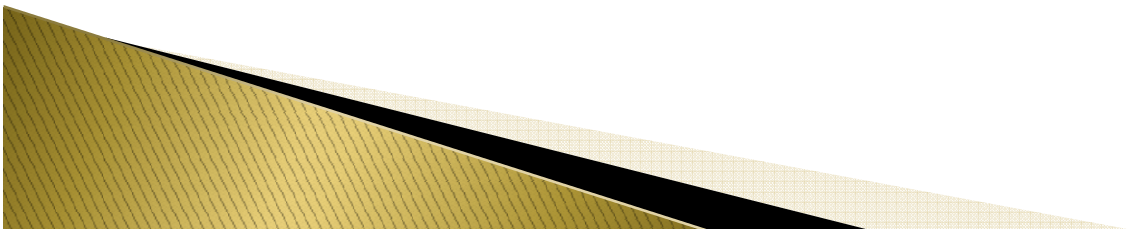
- ▶ Participants (n=15): regulated & non-regulated HCPs; employed in a CHC; part of core team; worked with ≥ 1 other HCP from different profession
 - ▶ Professions: SW, pharmacy, RN, FPN, NP, physician, PT, and 'other'
 - ▶ Gender: 2 males; 13 females
 - ▶ Age: 31 to 64 years
 - ▶ Employment: 73% (n=11) FTE; 27% (n=4) PTE or casual
 - ▶ Work experience: 53% (n=8) ≥ 21 years
 - ▶ Years working with team: 53% (n=8) > 6 years
- 

RQ1: How do HCPs define IPC?

IPC is...

- ▶ Understanding each others roles & responsibilities
- ▶ Communicating with each other
- ▶ Being available (physical & mental)
- ▶ Belonging

BUT it is prevented by hierarchy & turf protection

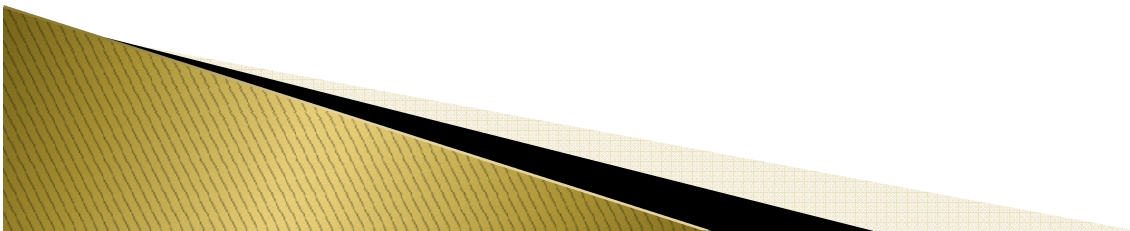


RQ1: What are HCP's perceived level of personal productivity?

HCPs feel productive when...

- ▶ Patient outcomes are achieved
- ▶ Able to get “everything” done

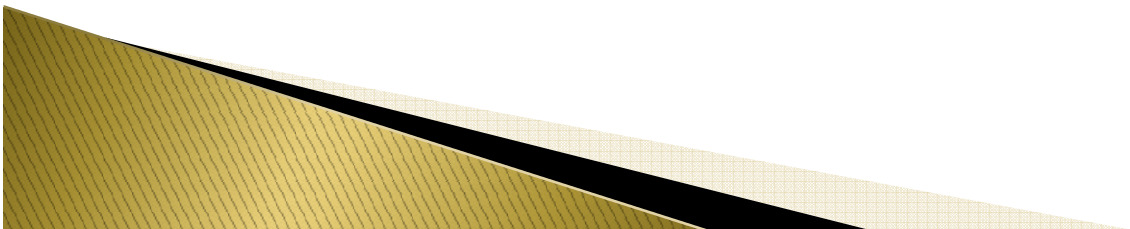
BUT productivity is affected by hierarchy & bureaucracy



RQ1: What are HCPs perceived level of team productivity?

The team is productive when...

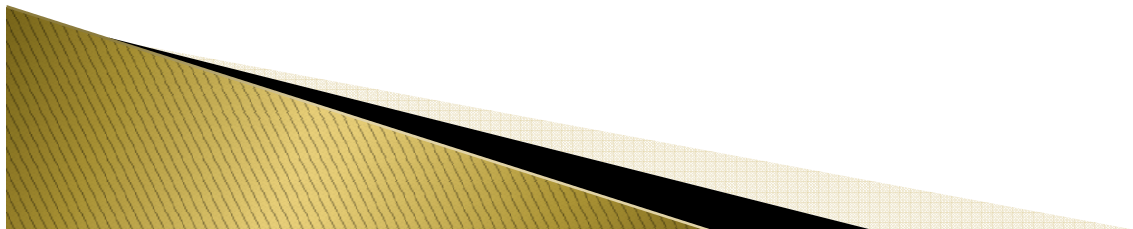
- ▶ The right person with the right skills provides patient-centred care
- ▶ HCPS are able to collaborate



RQ2: To what extent do HCPs demonstrate performance of IPC competencies?*

- ▶ Participants perceived that they were demonstrating the knowledge and skills attributed IPC at the *'above expected'* level.
- ▶ No participant averaged a score less than the *'expected'* level

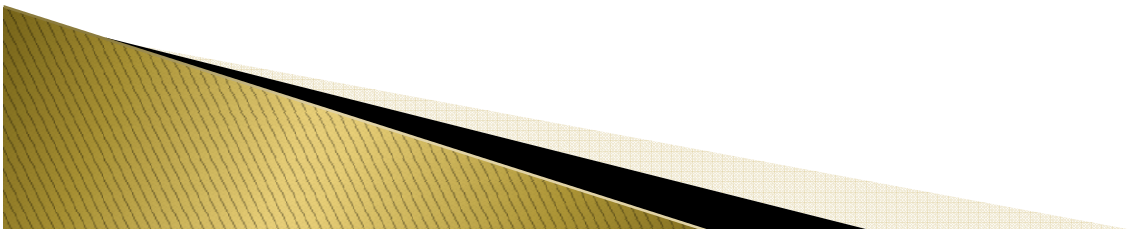
*peer-assessments not completed due to small numbers of participants



RQ3: How did the competency self-assessments change HCPs' definitions of IPC?

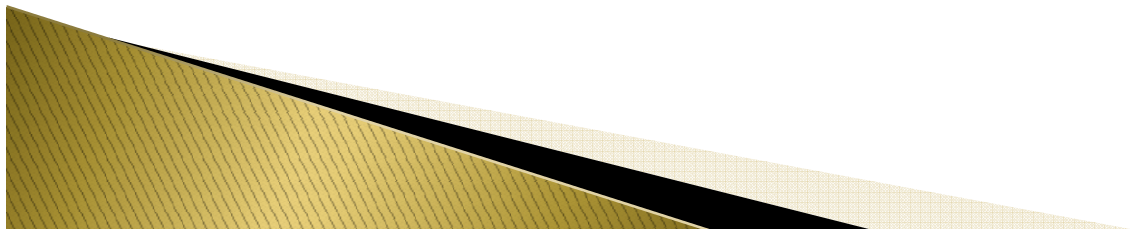
- ▶ IPC competencies were relevant
- ▶ Definitions were broadened
- ▶ Awareness of IPC was heightened

BUT the medical model sometimes prevented
IPC



RQ3: What are HCPs' perceptions of personal productivity after completing the self-assessments?

- ▶ No changes for some – they were unproductive and they knew it!
- ▶ Some changed their perception of productivity – didn't have to do "it" all alone

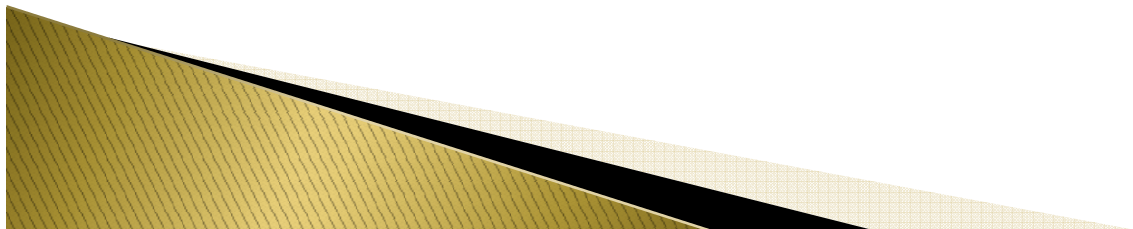


RQ3: What are HCPs' perceptions of team productivity after completing the self-assessments?

- ▶ Important to model IPC for others
- ▶ HCPs make a choice whether to stay on an IPC team

BUT...

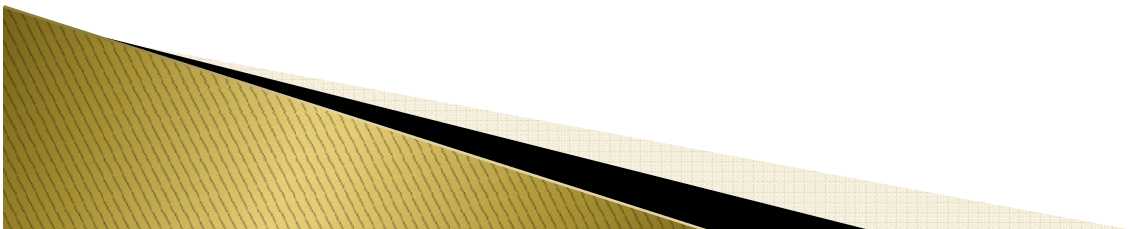
Barriers can impede team productivity



Integration

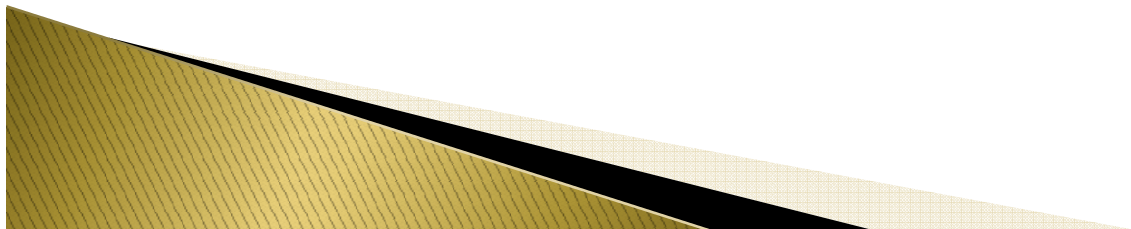
- ▶ HCPs are aware of the requisite knowledge and skills for IPC.
- ▶ There appears to be no gap between the service requirements (that is, care that is delivered collaboratively) and the services supplied (working collaboratively).

YET many barriers were identified that prevented IPC practice and negatively impacted HCP and team productivity.

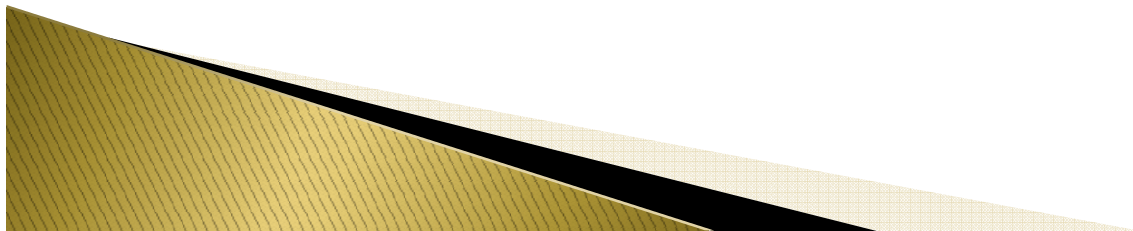


Final Thoughts...

- ▶ HCPs bring different mixes of skills, knowledge and judgment to the work place
- ▶ Focusing on the competencies or services provided by HCPs, rather than on the numbers alone, ensure a more realistic calculation to narrow the gap between supply and demand.



The significance of considering the competencies that are owned by the workforce and applied to their job cannot be overstated – it is of utmost importance that planners match health care need (requirements) with available HCP competencies (supply) if we are to get it right.



Contacts

- ▶ klackie@dal.ca
- ▶ Gail.tomblin.murphy@dal.ca

