

---

HEALTHCARE  
PROFESSIONALS'  
PERCEPTIONS OF  
INTERPROFESSIONAL  
COLLABORATION  
(IPC) IN THE INTENSIVE  
CARE SETTING:  
FACILITATORS AND  
BARRIERS.

DR. STEPHANIE MIFSUD &  
PROF. SANDRA. C. BUTTIGIEG

BACCN CONFERENCE 2024



# CONTENTS

1. Background to the Study
2. Statement of the Problem
3. Aim and Objectives
4. Research Question
5. Research Methodology
6. Results
7. Discussion
8. Strengths and Limitations of the Study
9. Implications and Recommendations
10. References

---

## BACKGROUND TO THE STUDY



**Interprofessional Collaboration (IPC)** – healthcare professionals (HCPs) from various disciplines collaborate with patients or clients, families, caregivers, and communities to deliver the utmost level of care (WHO, 2010).



**Benefits of good IPC**, enhanced quality of care, improved patient safety, shorter hospital stay, reduced costs, higher job satisfaction, and lower staff burnout and turnover (Feldman et al., 2012; Hanum & Findyartini, 2020; Kaiser et al., 2018; Zwarenstein et al., 2009, Chung et al., 2011; Piers et al., 2011; Rice et al., 2014).

## STATEMENT OF THE PROBLEM

- HCPs coming together for a common goal ensures patient-centred care in ICU (Bridges et al., 2011).
- HCPs operate in silos and expect IPC to occur organically (Bonello, 2018).
- Interactions between HCPs in the ICU still sub-optimal (Ervin et al., 2018)
- Different HCPs perceive and grade collaboration differently (Pawłowicz-Szlarska et al., 2022)
- To establish a shared model of effective IPC in the ICU, the perceptions of these HCPs need to be explored.

---

## AIM AND OBJECTIVES

### AIM

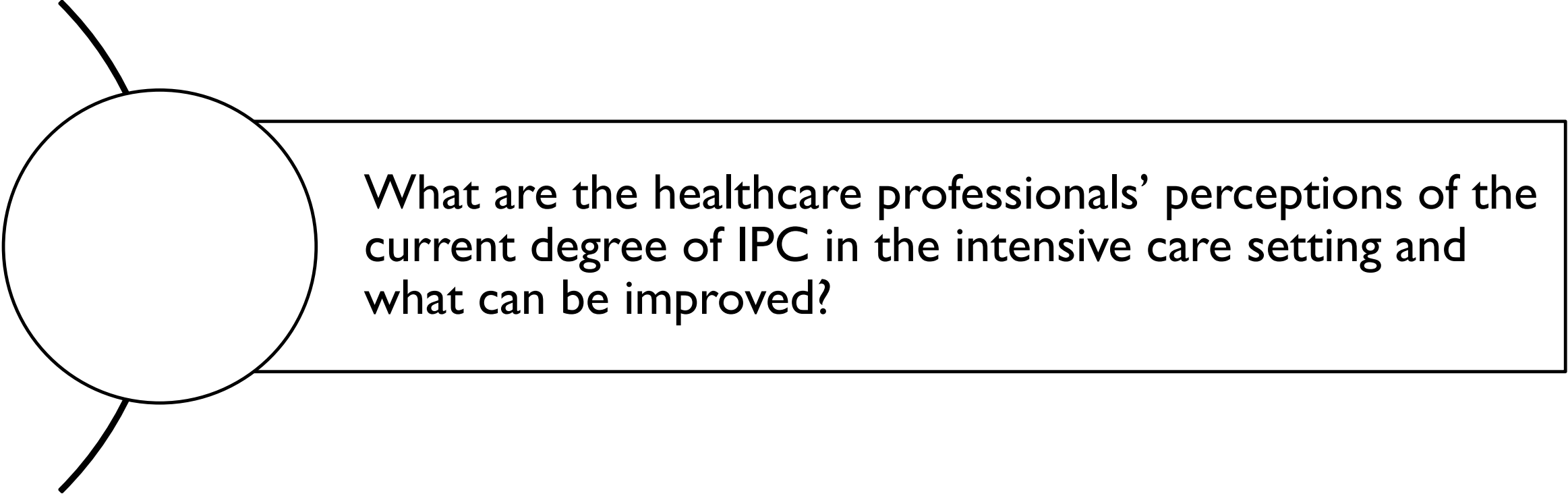
To explore HCPs' perceptions of the degree of interprofessional collaboration (IPC) within the intensive care setting.

### OBJECTIVES

1. To identify the facilitators and barriers to effective IPC
2. To develop recommendations for improving IPC in the ICU

---

## RESEARCH QUESTION

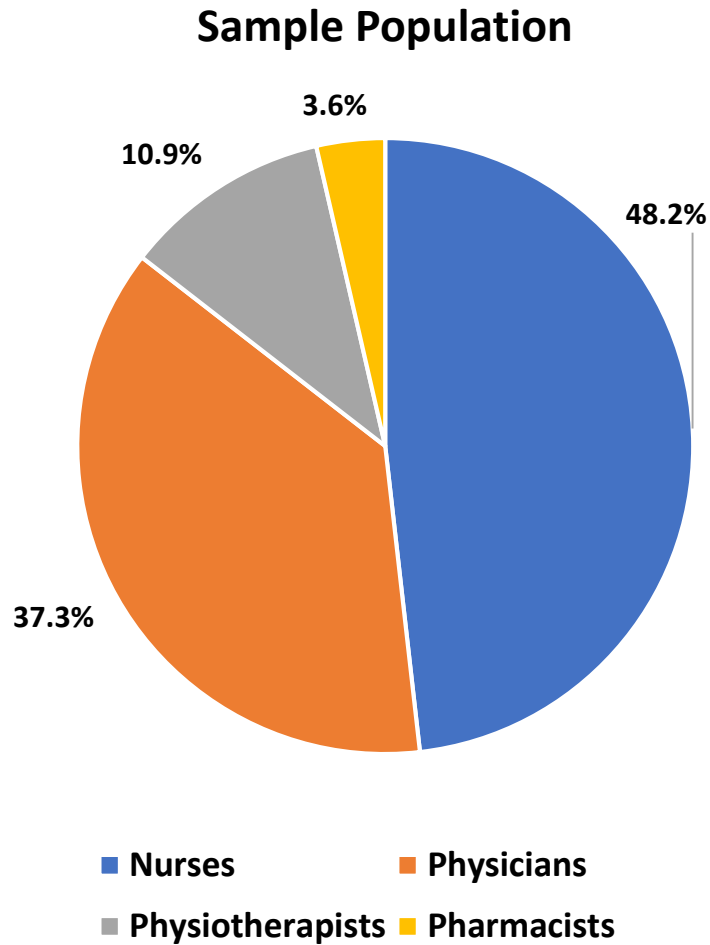


What are the healthcare professionals' perceptions of the current degree of IPC in the intensive care setting and what can be improved?

# RESEARCH METHODOLOGY

|                         |  |
|-------------------------|--|
| <b>Research Design</b>  | <ul style="list-style-type: none"><li>• Cross-sectional, Predominantly quantitative approach</li></ul> |
| <b>Ethical Approval</b> |  |
| <b>Site</b>             |  |
| <b>Participants</b>     |  |
| <b>Tools</b>            |  |
| <b>Data Collection</b>  |  |
| <b>Data Analysis</b>    |  |

## SAMPLE POPULATION CHARACTERISTICS:



- 63.6% (n=70) females, but there were no statistically significant differences in IPC
- 30 – 39 years (45.5%, n=50)
- 50% had less than 5 years of experience in the ICU
- 80.9% (n=89) responded to the 3 open-ended CPAT questions



## RESULTS – CPAT & AITCS-II

| <b>Psychometric Test</b>  | <b>Test</b>                   | <b>CPAT</b>                   | <b>AITCS-II</b> |
|---------------------------|-------------------------------|-------------------------------|-----------------|
| <b>Reliability</b>        | Cronbach<br>alpha coefficient | Overall Satisfactory (> .761) | Good (> .8)     |
| <b>Tests of Normality</b> |                               |                               |                 |

## RESULTS – CPAT & AITCS-II

| Psychometric Test  | Test                              | CPAT   | AITCS-II |
|--|-----------------------------------|--|----------|
| <b>Construct Validity</b> <ul style="list-style-type: none"> <li>Correlational Analysis</li> </ul> | Spearman's $r_s$<br>Pearson's $r$ | .764 ( $p < .005$ ) Highly correlated (Mukaka, 2012)<br>.796 ( $p < .001$ ) Strong correlation (Evans, 1996) |          |
| <ul style="list-style-type: none"> <li>Exploratory Factor Analysis</li> </ul>                      |                                   |  |          |
| <ul style="list-style-type: none"> <li>Confirmatory Factor Analysis</li> </ul>                     |                                   |  |          |

---

Q1: “What does your team do well with regards to collaborative practice?”

- **Interprofessional Teamwork (n=39)**
- **Team Process (n=37)**
- Effective Communication
- Patient and Family centred care

**THEME I:**  
**Facilitators to  
IPC**

---

**Q3: “What does your team need help with to improve collaborative practice?”**

- **Communication (n=42)**
- **Psychological Safety (n=24)**
- Evidence-based Practice
- Team Process
- Shared Decision-making
- Recognition of Expertise
- Improved Resources
- Leadership

**THEME 3:  
Improvements  
for IPC**

## DISCUSSION – FACILITATORS TO IPC

---

### Interprofessional Teamwork:

*P103, BST: “Excellent collaboration with physician and nurse team; added advantage that usually nurse acts as ambassador for other healthcare/allied healthcare professionals”*

---

Categories consistent with Fisher et al. (2017).

---

Effective and open communication - fundamental for successful IPC (Van den Blucke et al., 2016; Rawlinson et al., 2021).

---

Active involvement of patients and family members (Peltonen et al., 2020).

---

‘Multidisciplinary’ used interchangeably with ‘interprofessional collaborative practices’ (Golom & Schreck, 2018; Paradis & Reeves, 2013).

## DISCUSSION – CHALLENGES OR BARRIERS TO IPC

---

Conflict - Interpersonal and Interprofessional -  
about patient management

---

Contrasts with Soemantri et al.'s (2019) findings

---

Low perceptions of psychological empowerment  
(Liu et al. 2022)

---

*P41, SSN: “I think that our team just receives orders and executes them. ... have a passive role in collaborative practice. Final decisions are taken by physicians even in nurse related decisions”*

---

Improving collaboration – improves conflict  
management, & satisfaction with clinical decisions  
(Liu et al. 2022, Georgiou et al. 2015)

## DISCUSSION – IMPROVEMENTS TO IPC

- Communication (47% of participants),  
*P89, SSN: “listening, understanding, better explanation of actions decided by physician towards staff with rationales would improve greatly care towards patients”*
- Van den Blucke et al. (2016) suggests making sure the entire team is aware of the vision and feels safe to participate in decision-making.
- Fosters psychological safety, & shared decision-making.

---

# STRENGTHS AND LIMITATIONS OF THE STUDY

## STRENGTHS

- Utilising established instruments
- Comparability of findings with previous studies
- Contributes to existing literature and research gap
- Response rate of 65.1%

## LIMITATIONS

- Generalisability issues
- Selection biases
- Sample size
- Instrument – Reverse Coded items in CPAT
- Researcher's inexperience with content analysis



## IMPLICATIONS & RECOMMENDATIONS

### 1. Health Systems Management and Leadership

- Implementation Strategies for regular auditing of IPC
- Enhance organisational support and promotion of IPC

### 2. Education

- Interprofessional Education on collaborative leadership styles
- Regular Interprofessional Simulation-based learning and training

### 3. Future Research

- Interventional study to investigate the effectiveness of targeted interventions aimed at improving IPC
- Longitudinal study to explore the stability and sustainability of implemented initiatives or projects

KEY  
RECOMMENDATIONS  
FOR THE LOCAL  
CONTEXT

1. All HCPs should receive training in collaborative leadership styles
2. Organisational support for a cultural shift towards shared clinical decision making
3. Regular interprofessional simulation training
4. Perform post hoc analysis of the 80% of the sample population who answered the open-ended questions of the CPAT

---

# THANK YOU FOR YOUR ATTENTION



Email address: [stephanie.mifsud@um.edu.mt](mailto:stephanie.mifsud@um.edu.mt)

## QUESTIONS

# REFERENCES

1. Bonello, M. (2018). Developing Interprofessional Education in Malta: An exploratory case study. *Faculty Of Health Sciences, University of Malta*, 12(2), 154-171. Retrieved January 30, 2023 from [https://www.um.edu.mt/library/oar/bitstream/123456789/38769/1/MRER%2c\\_12%282%29\\_-\\_A1.pdf](https://www.um.edu.mt/library/oar/bitstream/123456789/38769/1/MRER%2c_12%282%29_-_A1.pdf)
2. Bridges, D., Davidson, R. A., Soule Odegard, P., Maki, I. V., & Tomkowiak, J. (2011). Interprofessional collaboration: Three best practice models of interprofessional education. *Medical Education Online*, 16(1), 6035-10. <https://doi.org/10.3402/meo.v16i0.6035>
3. Chung, B., Dopheide, J., & Gregerson, P. (2011). Psychiatric pharmacist and primary care collaboration at a skid-row safety-net clinic. *Journal of the National Medical Association; J Natl Med Assoc*, 103(7), 567-575. [https://doi.org/10.1016/S0027-9684\(15\)30382-5](https://doi.org/10.1016/S0027-9684(15)30382-5)
4. Evans, R. H. (1996). An Analysis of Criterion Variable Reliability in Conjoint Analysis. *Perceptual and Motor Skills*, 84, 988-990. <https://doi.org/10.2466/pms.1996.82.3.988>
5. Feldman, L. S., Costa, L. L., Feroli, E. R., Jr, Nelson, T., Poe, S. S., Frick, K. D., Efid, L. E., & Miller, R. G. (2012). Nurse-pharmacist collaboration on medication reconciliation prevents potential harm. *Journal of hospital medicine*, 7(5), 396-401. <https://doi.org/10.1002/jhm.1921>
6. Fisher, M., Weyant, D., Sterrett, S., Ambrose, H., & Apfel, A. (2017). Perceptions of interprofessional collaborative practice and patient/family satisfaction. *Journal of Interprofessional Education & Practice*, 8, 95-102. <https://doi.org/10.1016/j.xjep.2017.07.004>
7. Georgiou, E., Papatthanassoglou, E. D. E., & Pavlakis, A. (2017). Nurse-physician collaboration and associations with perceived autonomy in Cypriot critical care nurses: Collaboration and autonomy in intensive care nurses in Cyprus. *Nursing in Critical Care*, 22(1), 29-39. <https://doi.org/10.1111/nicc.12126>
8. Golom, F. D., & Schreck, J. S. (2018). The journey to interprofessional collaborative practice: Are we there yet? *The Pediatric Clinics of North America*, 65(1), 1-12. <https://doi.org/10.1016/j.pcl.2017.08.017>
9. Hanun, C., & Findyartini, A. (2020). Interprofessional shared decision-making: A literature review. *Jurnal Pendidikan Kedokteran Indonesia (Online)*, 9(1), 81-94. <https://doi.org/10.22146/ipki.49207>
10. Kaiser, S., Patras, J., & Martinussen, M. (2018). Linking interprofessional work to outcomes for employees: A meta-analysis. *Research in nursing & health*, 41(3), 265-280. <https://doi.org/10.1002/nur.21858>
11. Liu, Y., Zhang, Y., & Jin, J. (2022). The relationships of ethical climate, physician-nurse collaboration and psychological empowerment with critical care nurses' ethical conflict in china: A structural equation model. *Journal of Nursing Management*, 30(7), 2434-2441. <http://doi.org/10.1111/jonm.13848>
12. Mukaka, M. M. (2012). A guide to appropriate use of Correlation coefficient in medical research. *Malawi Med J*, 24(3), 69-71.
13. Orchard, C., Pederson, L. L., Read, E., Mahler, C., & Laschinger, H. (2018). Assessment of Interprofessional Team Collaboration Scale (AITCS): Further Testing and Instrument Revision. *The Journal of continuing education in the health professions*, 38(1), 11-18. <https://doi.org/10.1097/CEH.0000000000000193>
14. Paradis, E., & Reeves, S. (2013). Key trends in interprofessional research: a macrosociological analysis from 1970 to 2010. *Journal of interprofessional care*, 27(2), 113-122. <https://doi.org/10.3109/13561820.2012.719943>
15. Pawłowicz-Szlaraska, E., Sawościan, M., Lipińska, K., Kendys, K., & Nowicki, M. (2022). Interprofessional collaboration in the renal care settings: Experiences in the COVID-19 era. *Advances in clinical and experimental medicine: official organ Wroclaw Medical University*, 31(7), 749-755. <https://doi.org/10.17219/acem/146777>
16. Peltonen, J., Leino-Kilpi, H., Heikkilä, H., Rautava, P., Tuomela, K., Siekkinen, M., Sulosaari, V., & Stolt, M. (2020). Instruments measuring interprofessional collaboration in healthcare - a scoping review. *Journal of Interprofessional Care*, 34(2), 147-161. <https://doi.org/10.1080/13561820.2019.1637336>
17. Piers, R. D., Azoulay, E., Ricou, B., Dekeyser ganz, F., Decruyenaere, J., Max, A., Michalsen, A., Maia, P. A., Owczuk, R., Rubulotta, F., Depuydt, P., Meert, A. P., Reyners, A. K., Aquilina, A., Bekaert, M., Van den Noortgate, N. J., Schrauwen, V. J., & Benoit, D. D. (2011). Perceptions of appropriateness of care among European and Israeli intensive care unit nurses and physicians. *Journal of the American Association*, 306(24), 2694-2703. <http://doi.org/10.1001/jama.2011.1888>
18. Rawlinson, C., Carron, T., Cohidon, C., Arditi, C., Hong, Q. N., Pluye, P., Peytremann-Bridevaux, I., & Gilles, I. (2021). An Overview of Reviews on Interprofessional Collaboration in Primary Care: Barriers and Facilitators. *International journal of integrated care*, 21(2), 32. <https://doi.org/10.5334/ijic.5589>
19. Rice, V., Glass, N., Ogle, K., & Parsian, N. (2014). Exploring physical health perceptions, fatigue and stress among health care professionals. *Journal of multidisciplinary healthcare*, 7, 155-161. <https://doi.org/10.2147/JMDH.S59462>
20. Schroder, C., Medves, J., Paterson, M., Byrnes, V., Chapman, C., O'Riordan, A., Pichora, D., & Kelly, C. (2011). Development and pilot testing of the collaborative practice assessment tool. *Journal of Interprofessional Care*, 25(3), 189-195. <https://doi.org/10.3109/13561820.2010.532620>
21. Soemantri, D., Kambey, D. R., Yusra, R. Y., Timor, A. B., Khairani, C. D., Setyorini, D., & Findyartini, A. (2019). The supporting and inhibiting factors of interprofessional collaborative practice in a newly established teaching hospital. *Journal of Interprofessional Education & Practice*, 15, 149-156. <https://doi.org/10.1016/j.xjep.2019.03.008>
22. Van den Bulcke, B., Vyt, A., Vanheule, S., Hoste, E., Decruyenaere, J., & Benoit, D. (2016). The perceived quality of interprofessional teamwork in an intensive care unit: A single centre intervention study. *Journal of interprofessional care*, 30(3), 301-308. <https://doi.org/10.3109/13561820.2016.1146876>
23. World Health Organisation. (2010, September 1). *Framework for Action on Interprofessional Education & Collaborative Practice. Health workforce*. <https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice>
24. Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews; Cochrane Database Syst Rev*, (3), CD000072: 1-31. <https://doi.org/10.1002/14651858.CD000072.pub2>