

RURAL IPE: A STUDY OF STUDENT PERSPECTIVES

Curt Stilp, Ed.D., PA-C
Director, Oregon AHEC
Assistant Professor, OHSU PA Program



NATIONAL CENTER for
INTERPROFESSIONAL
PRACTICE and EDUCATION



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

This activity has been planned and implemented by the National Center for Interprofessional Practice and Education. *In support of improving patient care, the National Center for Interprofessional Practice and Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.*

Physicians: The National Center for Interprofessional Practice and Education designates this live activity for a maximum of **1.5 AMA PRA Category 1 Credits™**.

Physician Assistants: The American Academy of Physician Assistants (AAPA) accepts credit from organizations accredited by the ACCME.

Nurses: Participants will be awarded up to **1.5** contact hours of credit for attendance at this workshop.

Nurse Practitioners: The American Academy of Nurse Practitioners Certification Program (AANPCP) accepts credit from organizations accredited by the ACCME and ANCC.

Pharmacists: This activity is approved for **1.5** contact hours (.15 CEU) UAN: JA4008105-0000-18-066-L04-P



NATIONAL CENTER for
INTERPROFESSIONAL
PRACTICE and EDUCATION



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

Disclosures:

The National Center for Interprofessional Practice and Education has a conflict of interest policy that requires disclosure of financial relationships with commercial interests.

Curt Stilp

does not have a vested interest in or affiliation with any corporate organization offering financial support for this interprofessional continuing education activity, or any affiliation with a commercial interest whose philosophy could potentially bias their presentation.



NATIONAL CENTER for
INTERPROFESSIONAL
PRACTICE and EDUCATION



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

All workshop participants:

- Scan your badge barcode or sign in to each workshop
- Complete workshop evaluations (paper) and end-of-Summit evaluation (electronic)

Those who purchase CE credit:

- MUST sign in to receive credit
- Will be sent a certificate after the Summit

****If you would like CE credit but have not purchased it, see Registration

Today's Objectives

- Describe the challenges and barriers to IPE in the clinical environment
- Explore the context of a rural IPE experience on students' perspectives of interprofessional practice
- Explain the importance of social interaction (*Social-IPE*) in achieving the goals of IPE
- Discuss the implications of a rural IPE program on the future of IPE and collaborative team-based care

Background

- Rural communities need health care professionals ^{1,2,3,4}
- Health of the rural community suffers ^{5,6,7,8}
- Collaborative team-based care is needed in rural ^{1,9,10,11,12,13}
- Providers that are team-based practice ready are needed in rural ^{10, 14}

Background

- IPE is a way to prepare health care professionals for collaborative team-based practice ^{1,15}
- IPE is moving into the clinical realm ^{15,18,19}
- Social learning during experiential training is an important element ^{16,17}
- Rural IPE influences perception of team and rural ^{1,11,20,21}
- Rural training impacts post-graduation decisions ^{1,22,23,24}

Background

- ◎ Multiple factors influence future practice decisions ^{7,22,23,25,26,27,28,29,30,31}
 - Personal
 - Professional
 - Social
 - Community

Background

Important to explore (rural IPE):

- What factors go into making practice decisions ^{22,23,25}
- What experiential elements (curricular & non-curricular) shape students perspectives of rural, team, IPE ^{1, 32}

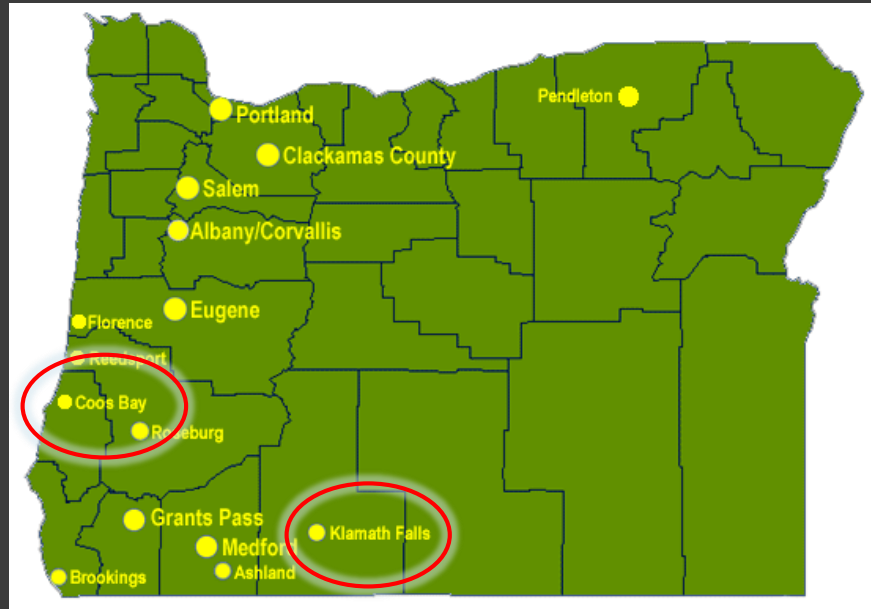
Research Questions

1. How does working with an interprofessional team shape student views on future work with people in those professions?
2. How does the rural IPE experience influence a student's perspective on working in a rural setting?
3. What factors do students participating in a rural IPE experience consider most important and least important in making a decision to practice team-based care in a rural setting?

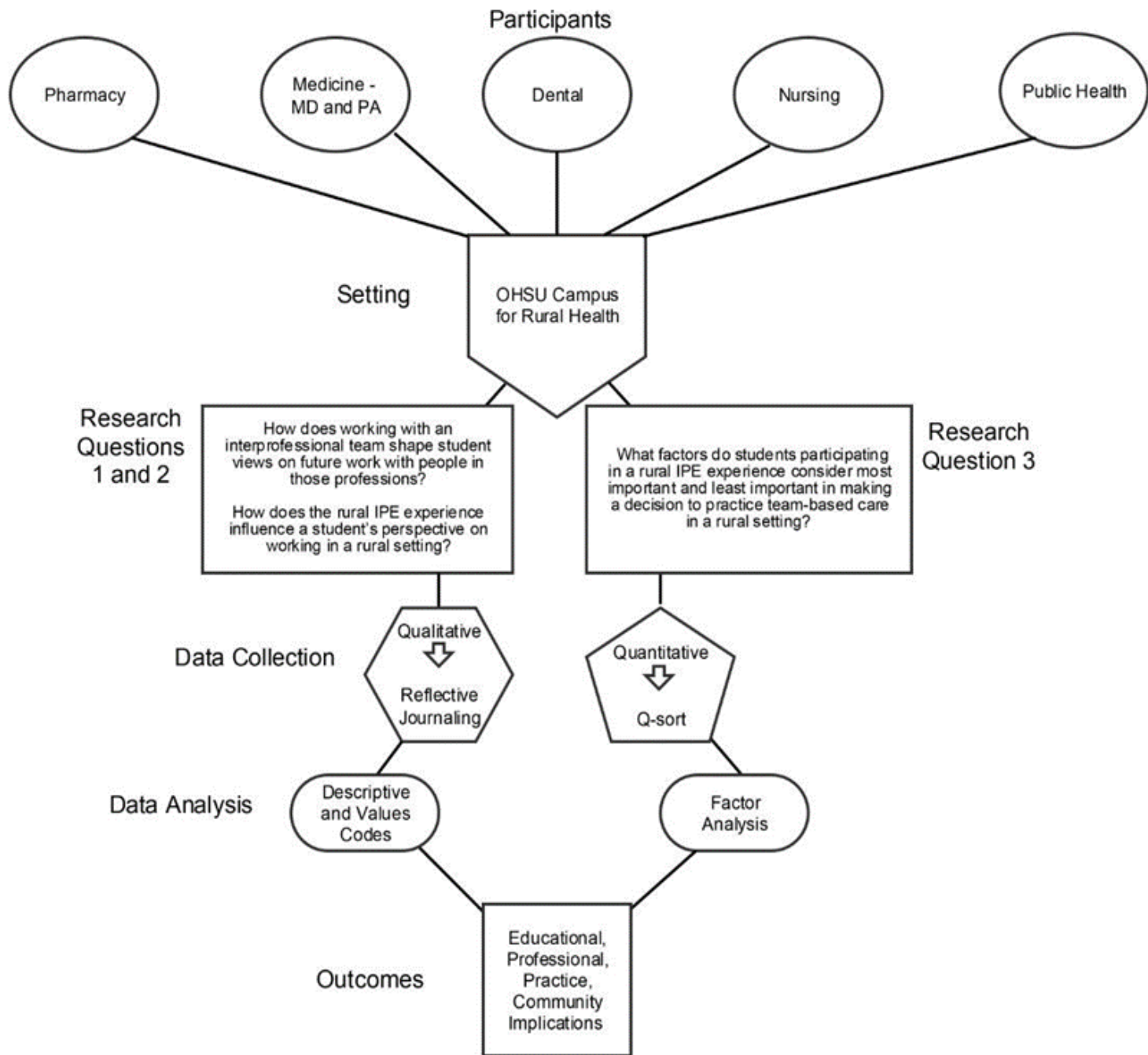
Study Setting

- Two Campus for Rural Health locations

- Coos Bay
- Klamath Falls



- Shared university-provided housing
- 5 health care professions
- IPE (curriculum) – community-based project course



Data Collection

- ⦿ June 2016 – June 2017
- ⦿ Qualitative: Reflection journal collected
- ⦿ Quantitative: Q sort administered by independent Research Assistant

Data Collection – Participants

- ◎ 51 participants – Quantitative
- ◎ 30 participants – Qualitative
- ◎ 5 health care professions (MD, PA, DMD, PharmD, FNP)
- ◎ Other demographics collected – Quantitative

Data Analysis

- ◎ Qualitative – Reflections centered on 2 prompts (research questions 1 and 2)
 - Descriptive Coding – themes
 - Values Coding – themes
- ◎ Quantitative – Q method/sort
 - Factor Analysis

Journal Analysis

- Descriptive coding
 - Descriptive words – experience or environment
 - Themes – similar words, phrases, or descriptions

| Major Themes | Humanistic Perspective | | | Health Care Provider Perspective |
|-------------------|--|--|---|---|
| Subthemes | Cold | Neutral | Warm | Inter-professional |
| Descriptive Codes | Small Remote Isolated In-adequate Outsider Struggle | Nature Inter-connected Vast Informative | Earnest Wel-coming Tight-knit Sincere Resolute Beautiful | Silos Absent Collaborative Supportive Freedom |

Journal Analysis

⦿ Values coding

- Words or phrases representing a value, attitude, or belief about rural, team, rural IPE
- Grouped together (value, attitude, belief)
- Similarities within and among the groups – themes developed

Values Coding

Values

Fresh perspectives
Social interactions
Whole group contribution
Making a difference
Holistic care
Feedback
Learning opportunities

Attitudes

Appreciation of differences
Enjoyed the setting
Gratefulness for the experience
Respect for other professions
Can work with others
Anticipate the future
Open to rural

Beliefs

Medicine is a team effort
Rural is great for IPE
Professional familiarity
Generalist providers
Large scope of practice
Local hospital is needed
Rural hospitals are more adaptable

Journal Analysis

- ⦿ Values coding
 - Words or phrases representing a value, attitude, or belief about rural, team, rural IPE
 - Grouped together (value, attitude, belief)
 - Similarities within and among the groups – themes developed

Values Coding

Values

Fresh perspectives

Social interactions
Whole group contribution
Making a difference
Holistic care
Feedback
Learning opportunities

Attitudes

Appreciation of differences

Enjoyed the setting
Gratefulness for the experience

Respect for other professions

Can work with others
Anticipate the future
Open to rural

Beliefs

Medicine is a team effort
Rural is great for IPE
Professional familiarity
Generalist providers
Large scope of practice
Local hospital is needed
Rural hospitals are more adaptable

Journal Analysis

- ⦿ Values coding
 - Words or phrases representing a value, attitude, or belief about rural, team, rural IPE
 - Grouped together (value, attitude, belief)
 - Similarities within and among the groups – themes developed

Values Coding

Values

Fresh perspectives
Social interactions
Whole group contribution
Making a difference
Holistic care
Feedback
Learning opportunities

Attitudes

Appreciation of differences
Enjoyed the setting
Gratefulness for the experience
Respect for other professions
Can work with others
Anticipate the future
Open to rural

Beliefs

Medicine is a team effort
Rural is great for IPE
Professional familiarity
Generalist providers
Large scope of practice
Local hospital is needed
Rural hospitals are more adaptable

Journal Analysis

⦿ Values coding

- Words or phrases representing a value, attitude, or belief about rural, team, rural IPE
- Grouped together (value, attitude, belief)
- Similarities within and among the groups – themes developed

Values Coding

Values

Fresh perspectives
Social interactions
Whole group contribution
Making a difference
Holistic care
Feedback
Learning opportunities

Attitudes

Appreciation of differences
Enjoyed the setting
Gratefulness for the experience
Respect for other professions
Can work with others
Anticipate the future
Open to rural

Beliefs

Medicine is a team effort
Rural is great for IPE
Professional familiarity
Generalist providers
Large scope of practice
Local hospital is needed
Rural hospitals are more adaptable

Journal Analysis

- Values coding
 - Words or phrases representing a value, attitude, or belief about rural, team, rural IPE
 - Grouped together (value, attitude, belief)
 - Similarities within and among the groups – themes developed

| Values Coding |
|---------------------------------------|
| Values |
| Fresh perspectives |
| Social interactions |
| Whole group contribution |
| Making a difference |
| Holistic care |
| Feedback |
| Learning opportunities |
| Attitudes |
| Appreciation of differences |
| Enjoyed the setting |
| Gratefulness for the experience |
| Respect for other professions |
| Can work with others |
| Anticipate the future |
| Open to rural |
| Beliefs |
| Medicine is a team effort |
| Rural is great for IPE |
| Professional familiarity |
| Shared housing is the best for of IPE |
| Large scope of practice |
| Local hospital is needed |
| Rural hospitals are more adaptable |

Journal Analysis

● Values coding

• Seven themes

1. Social Connectedness
2. Role Appreciation
3. Collegiality
4. Rural Appeal
5. Patient Centered
6. Education
7. Challenges

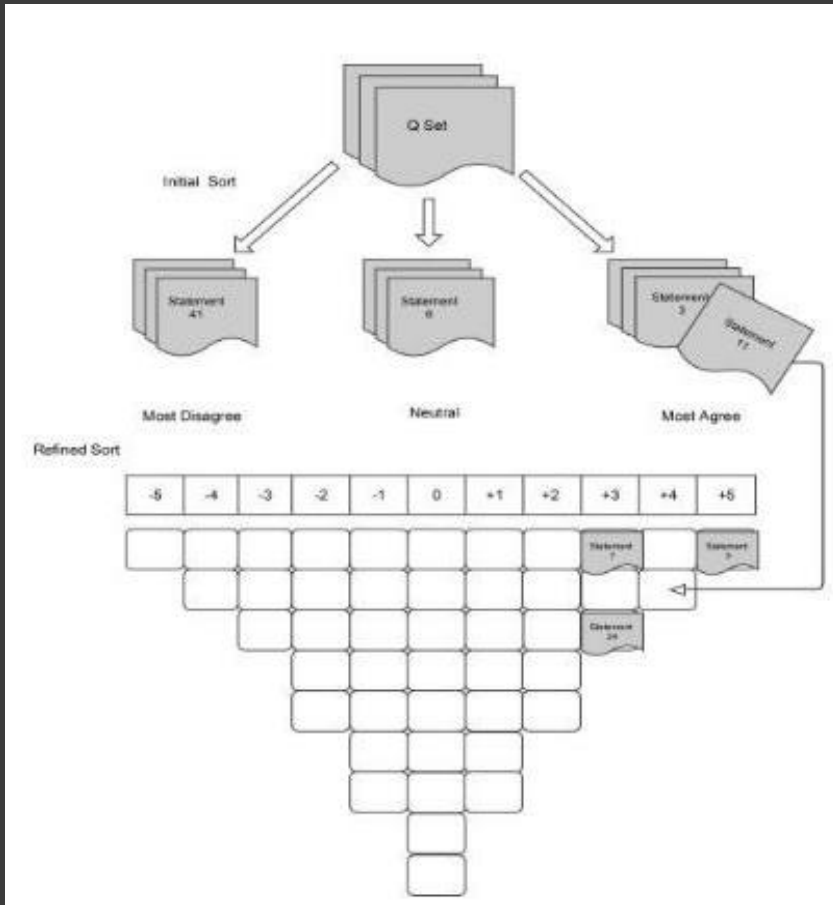
| Values Coding Category | | | |
|------------------------|---|--|---|
| Theme | Values | Attitude | Belief |
| Role Appreciation | Working with other professionals Learn about other professions Fresh perspectives | Expanded mindset Appreciation of differences Respect for other professions | IPE increases understanding The different professions are needed PAs and MDs are very similar |
| Collegiality | Whole group contribution Learn about other professions Holistic care | Expanded mindset Appreciation of differences Can work with others | IPE increases understanding The different professions are needed Medicine is a team effort |
| Rural Appeal | Making a difference Learning opportunities Rural learning environment | Jumping in with both feet Open to rural Enjoy the setting | Large scope of practice Rural hospitals are more adaptable Greater impact in rural |

Journal Interpretation

- ⦿ Enjoyed the rural IPE experience
- ⦿ Limited clinical IPE
- ⦿ High-value on non-clinical IPE/social time
- ⦿ Community engagement is key
- ⦿ Gained an appreciation for the hardships rural communities and providers face
 - Future practice decisions
 - Need for team
- ⦿ Understanding for how the different roles fit into the team (see themselves in the team)
- ⦿ Barriers exist

Q Methodology

Q sort



- Objectively measure subjectivity
- Measures the byproduct of a person's internal dialogue
- Explored with a group who underwent a similar experience
- Sort statements related to the experience in relation to the other statements
- Completed Q sort represents the student's vantage point on that topic
- Shared perspectives
- What elements make up those perspectives (focus on the extremes of the Q sort)

Q Set

- 35 total statements
 - 17 - student journals
 - 18 - literature
 - 4 – 5 from each category

| Statement | Category | Source |
|--|-----------|----------------------------|
| Time and sustained presence in a community helped build trust and familiarity. | Social | Henry & Hooker, 2007 |
| Working together in the clinic serves as great “peer” support that is needed. | Team | Student reflection journal |
| Rural communities have limited funds which restrict what care can be provided. | Community | Student reflection journal |
| IPE leads to a greater understanding of my own role on the health care team. | Team | Ponzer et al., 2004 |
| The availability of outdoor activities attracts me to the rural setting. | Personal | Student reflection journal |
| The most effective rural IPE allows for engagement in the community. | Education | Deutchman et al., 2012 |

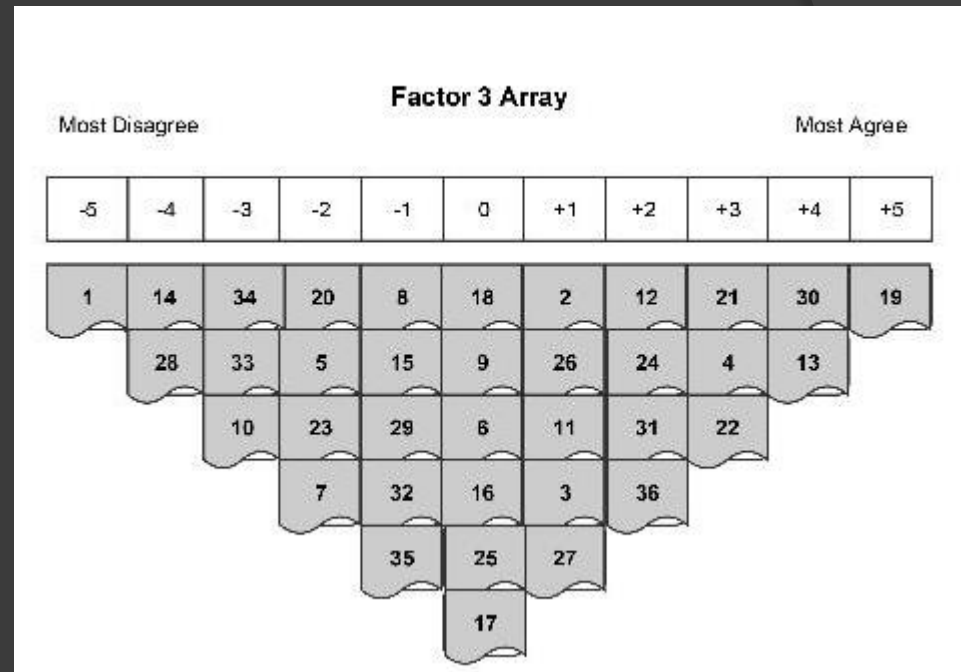
Q sort Analysis

Demographics

- Age
- Rural background
- Children
- Married/partnered
- Health care profession
- Location of experience

Factor analysis

- Factor array
 - Representative sort for each shared perspective



Q sort Demographics

- Age range 24-52 (mean 29.2)
- 24 – PA
- 15 – MD
- 7 – DMD
- 3 – FNP
- 1 – MD/DMD
- 1 – did not specify
- Near even split – female (26) and male (25)
- Majority married/partnered without children (48)
- Majority not from a rural background (32)
- Majority were in Coos Bay (32)

Q sort Interpretation

● Four Shared Perspectives

1. Team Impartial Rural Optimists

- ❖ Most – time spent in rural, IPE
- ❖ Least – prior knowledge of rural, team-based care

2. Team-Willing Rural Skeptic

- ❖ Most – raising kids in urban setting, isolation, no familiarity
- ❖ Least – challenges facing rural providers, value of community

Q sort Interpretation

◎ Four Shared Perspectives

3. Independent Rural Inclined

- ❖ Most – outdoor lifestyle, rural area
- ❖ Least – team, community engagement, IPE, raising a family, familiarity with rural

4. Team-Oriented Rural Neutral

- ❖ Most – Team, social connection, time, community
- ❖ Least – familiarity with rural, IPE, outdoor lifestyle

Q sort Interpretation

◎ Four Shared Perspectives

- All 4 viewed sustained time and presence in rural community was useful for making future practice decisions
- All 4 did not feel overly positive or negative about the combined knowledge and strength to provide care

Study Conclusions

- ⦿ Clinic is not where IPE (from, with, about) took place
- ⦿ “*Social-IPE*” is an important piece to the success of rural IPE
- ⦿ Rural IPE is useful for making post-graduation practice decisions
 - Motivation for rural
 - Developing understanding and familiarity
 - Team-based model
- ⦿ Rural IPE has its challenges
 - Clinical
 - Educational

Recommendations

- ⦿ Continue Rural IPE
- ⦿ Support/recognize Social-IPE
- ⦿ Team-based clinical environment
- ⦿ Address scheduling differences
 - Clinical specific cohorts
- ⦿ Provide opportunities for reflection

Limitations

- ⦿ No correlation between qualitative and quantitative
- ⦿ No educational sequence data
- ⦿ No qualitative demographics

Small Group Discussion*

- ⦿ Future IPE (urban and rural)
 - Curricular implications
 - Geography
- ⦿ Existing team-based care
 - Clinical practice implications
- ⦿ Motivation for:
 - Rural
 - Team

* Focus on the non-curricular aspects

Debrief

- ⦿ Future IPE (urban and rural)
 - Curricular implications
 - Geography
- ⦿ Existing team-based care
 - Clinical practice implications
- ⦿ Motivation for:
 - Rural
 - Team

Final Task

- Describe the ideal experiential community-based IPE program

References

1. Mu, K., Chao, C. C., Jensen, G. M., & Royeen, C. B. Effects of interprofessional rural training on students' perceptions of interprofessional health care services. *Journal of Allied Health*, 2004; 33(2), 125-131.
2. Smith, T., Thornberry, T., Lyons, M., & Jones, P. *The challenge of evaluating rural undergraduate multi-professional education*, March, 2005; Paper presented at the Australian National Rural Health Conference, Alice Springs, Australia.
3. Jensen, G. M., & Royeen, C. B. Improved rural access to care: Dimensions of best practice. *Journal of Interprofessional Care*, 2002; 16(2), 117-128. doi:10.1080/13561820220124139
4. Petterson, S. M., Phillips Jr, R. L., Bazemore, A. W., & Koinis, G. T. Unequal distribution of the U.S. primary care workforce. *American Family Physician*, 2013; 87(11), Retrieved from <http://europepmc.org.proxy.lib.pdx.edu/search;jsessionid=DKPISCk9PVehqEp0hyz0.0?page=1&query=JOURNAL:%22Am+Fam+Physician%22>
5. Kaiser Commission on Medicaid and the Uninsured. *The uninsured in rural America*, 2003; Retrieved from <https://kaiserfamilyfoundation.files.wordpress.com/2013/01/the-uninsured-in-rural-america-update-pdf.pdf>
6. Spleen, A. M., Lengerich, E. J., Camacho, F. T., & Vanderpool, R. C. Health care avoidance among rural populations: Results from a nationally representative survey. *The Journal of Rural Health*, 2014; 30(1), 79-88.
7. Slama, K. Rural culture is a diversity issue. *Minnesota Psychologist*, 2004; 53(1), 9-12.
8. Bailey, J. *Making health insurance affordable: Assistance to individuals and families in the Affordable Care Act*, 2013; Retrieved from <http://www.cfra.org/node/4733>
9. Golden, A., & Miller, K. P. Championing truly collaborative team-based care. *Annals of Internal Medicine*, 2013; 159(9), 640-642.
10. Illing, J. C., & Crampton, P. E. Collaborative relationships and learning in rural communities. *Medical Education*, 2015; 48(9), 850-858. doi:10.1111/medu12784
11. Spencer, J., Woodroffe, J., Cross, M., & Allen, P. "A golden opportunity": Exploring interprofessional learning and practice in rural clinical settings. *Journal of Interprofessional Care*, 2015; 29(4), 389-391.

References

12. Croker, A., & Hudson, J. N. Interprofessional education: Does recent literature from rural settings offer insights into what really matters? *Medical Education*, 2015; 49(9), 880-887.
13. Rygh, E. M., & Hjortdahl, P. Continuous and integrated health care services in rural areas. A literature study. *Rural and Remote Health*, 2007; 7(3). Retrieved from <http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=766>
14. Chen, F., Fordyce, M., Andes, S., & Hart, L. G. Which medical schools produce rural physicians? A 15-year update. *Academic Medicine*, 2010; 85(4), 594-598. doi:10.1097/ACM.0b013e3181d280e9
15. Ponzer, S., Hylin, U., Kusoffsky, A., Lauffs, M., Lonka, K., Mattiasson, A. C., & Nordström, G. Interprofessional training in the context of clinical practice: Goals and students' perceptions on clinical education wards. *Medical Education*, 2004; 38(7), 727-736. doi:10.1111/j.1365-2929.2004.01848.x
16. Gerdes H, Mallinckrodt B. Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *J Couns Dev*. 1994;72,281-288. Doi:10.1002/j.1556-6676.1994.tb00935.x
17. Terenzini PT, Rendon LI, Lee Upcraft M, Miller SB, Allison KW, Gregg PL. The transition to college: Diverse students, diverse stories. *Res High Educ*. 1994;35(1), Doi: <https://doi-org.proxy.lib.pdx.edu/10.1007/BF02496662>
18. Stew, G. Learning together in practice: A survey of interprofessional education in clinical settings in South-East England. *Journal of Interprofessional Care*, 2005; 19(3), 223-235. doi:10.1080/13561820500138685
19. Cox M, Naylor M. Transforming patient care: Aligning interprofessional education with clinical practice redesign. Proceedings of a Conference sponsored by the Josiah Macy Jr. Foundation. 2013;New York: Josiah Macy Jr. Foundation.
20. Stone, N. The rural interprofessional education project (RIPE). *Journal of Interprofessional Care*, 2006; 20(1), 79-81.
21. Wros, P., Mathews, L. R., Voss, H., & Bookman, N. An academic-practice model to improve the health of underserved neighborhoods. *Family and Community Health*, 2015; 38(2), 195-203.
22. Tolhurst, H., Adams, J., & Stewart, S. An exploration of when urban background medical students become interested in rural practice. *Rural and Remote Health*. 2006; 6(452). Retrieved from <http://hdl.handle.net/10453/15689>

References

22. Hancock, C., Steinbach, A., Nesbitt, T. S., Adler, S. R., & Auerswald, C. L. Why doctors choose small towns: A developmental model of rural physician recruitment and retention. *Social Science and Medicine*, 2009; 69(9), 1368-1376.
23. Rabinowitz, H. K., Diamond, J. J., Markham, F. W., & Wortman, J. R. Medical school programs to increase the rural physician supply: A systematic review and projected impact of widespread replication. *Academic Medicine*, 2008; 83(3), 235-243. doi:10.1097/ACM.0b013e318163789b
24. Deutchman, M. E., Nearing, K., Baumgarten, B., & Westfall, J. M. Interdisciplinary rural immersion week. *Rural and Remote Health*, 2012; Retrieved from <http://www.rrh.org.au>
25. Kazanjian, A., & Pagliccia, N. Key factors in physicians' choice of practice location: Findings from a survey of practitioners and their spouses. *Health and Place*, 1996; 2(1), 27-34.
26. Pathman, D. E., Konrad, T. R., Dann, R., & Koch, G. Retention of primary care physicians in rural health professional shortage areas. *American Journal of Public Health*, 2004; 94(10), 1723-1729.
27. Rabinowitz, H. K., Diamond, J. J., Markham, F. W., & Hazelwood, C. E. A program to increase the number of family physicians in rural and underserved areas: Impact after 22 years. *Journal of the American Medical Association*, 1999; 281(3), 255-260.
28. Mayo, E., & Mathews, M. *Spousal perspectives on factors influencing recruitment and retention of rural family physicians*, 2006; Ottawa, ON, Canada: Society of Rural Physicians of Canada.
29. Bell, M. M. The fruit of difference: The rural-urban continuum as a system of identity. *Rural Sociology*, 1992; 57(1), 65-82.
30. Whitcomb, M. E. The challenge of providing doctors for rural America. *Academic Medicine*, 2005; 80(8), 715-716.
31. Svinicki, M. D. *Learning and motivation in the postsecondary classroom*. 2014; Bolton, MA: Anker Publishing

Questions?