

Heartland Innovations in Interprofessional Practice and Education Summit • July 17-18, 2025 **ONLINE**

**Transforming Futures:**  
Innovation and Disruption in Interprofessional  
Health Care and Education

DES MOINES UNIVERSITY  
MEDICINE & HEALTH SCIENCES



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**Innovative Tech & IPE: Enhancing  
Stroke Care for Women in Rural  
Communities**

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**Disclosure**

We do not have any financial relationships with ineligible  
companies to disclose.

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## Learning Objectives

1. Explore the use of interactive technology and hybrid learning models in interprofessional education (IPE) for stroke care.
2. Discuss strategies for overcoming barriers to implementing technology-enhanced IPE in rural healthcare education.
3. Apply lessons learned from this initiative to improve their own interprofessional teaching and stroke care programs.

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## Background

### NE Stroke Task Force Background

Through a block grant secured through DHHS in partnership with the Nebraska Stroke Task Force, an interprofessional committee was formed to determine gaps in Nebraska rural practices and response to women experiencing strokes.



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## Methodology

### Data Collection:

- A literature review
- Gap analysis
- Review of Nebraska Outcomes

### Brainstorming Sessions:

- Defining the Target Audience
- Identifying Educational Gaps
- Choosing Conference Delivery Methods
- Managing Resources and Locations
- Considering dream partnerships

### Critical Decisions

- Key strategies to target multiple sites in Nebraska
- Virtual conference
- What practitioners
- Seeking suitable venues for broad outreach.



(Buring et al., 2009)

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### Program Details


**Finding our goals:**

- Engage various practitioners
- Address NE's stroke needs
- Target audience includes:
  - Nurses
  - Physicians
  - Advanced Practice Providers
  - Occupational Therapists
  - Physical Therapists
  - Speech Language Pathologists
  - Case Managers



**Strategy Development**

- Target multiple sites in Nebraska
- Virtual conference
  - Northeast Nebraska
  - Omaha/Lincoln Metro
  - Central/Western Nebraska,
  - Panhandle.



**Creating a team**

- iExcel partnered to implement smart walls in Norfolk, Omaha, Kearney, and Scottsbluff for an interactive one-day conference featuring live presentations at all sites.
- A Partnership was born!

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### Technology Choices

**Engagement Equity**


- Technology that kept both in person and alternate sites engaged
- Real-time polling and participation
  - Mentimeter, Padlet

**Tech Infrastructure & Integration:**

- Seamless access to tools like medical imaging viewers (iWall).
- QR Code access to imaging on devices
- Redundancy plans for audio/video failure.

**Collaborative Learning Environment**

- Interactive case studies where all learners contribute live.
- Smart room design (e.g., microphones/cameras to pick up all voices).
- Tools that support annotation, shared screens, or collaborative notes.



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### Literature Analysis

**Trends:**

A literature review and gap analysis identified sex-based disparities in stroke care..



**Our Own State:**

- On average in Nebraska men get discharged to inpatient rehab 3% more than women versus 1% more than women nationally
- On average in Nebraska men get treated with Alteplase with in 30 min 7% more often than women versus 3% more than women nationally
- In Nebraska and Nationally men have an 11% more likelihood to have a stroke ages 46-65 than women.
- In Nebraska and nationally men have 2.5% longer length of stay in a hospital than women.

**Important findings:**

- Reproductive & Pelvic Health Post-Stroke**
  - Often overlooked for women post-stroke.
  - Emphasis on pelvic health is essential due to stroke-related disabilities.
- Stroke and Pregnancy Statistics**
  - Pregnant women face a threefold increase in stroke risk.
  - Preeclampsia and hormonal birth control further elevate risks.
- Pelvic Health Issues Post-Stroke**
  - Urinary incontinence affects 40-60% of stroke patients initially, dropping to 25% at discharge, with 15% still affected a year later.
- Young Women & Stroke Recovery**
  - Young women encounter unique challenges in life transitions and sexual health during recovery.
- Unique Rehabilitation Challenges for Young Stroke Patients**
  - 1 in 5 stroke survivors are under 65, impacting rehab needs related to employment and caregiving.
  - Focus on fitness and leisure activities in rehab programs.
- Specific Needs of Young Women in Stroke Rehab**
  - Women <35 years have a higher incidence of ischemic strokes.
  - They require tailored interventions and support for better outcomes.
- Tailored Care for Young Stroke Patients**
  - Services should adapt to daily living, motherhood, and workforce re-entry.
  - Emphasis on technology and support systems for younger survivors.

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Outcomes



Successful Multi-Site Hybrid Conference

- Engaged diverse healthcare professionals
- Fostered collaboration among attendees
- Increased awareness of sex-specific stroke factors

Positive Outcomes

- Participants reported greater confidence in addressing stroke-related challenges
- Project recognition: - iExcel Rural Outreach Award
- Invited to share lessons at international conference

Future Plans

- Expansion through an impact study
- Research on interprofessional education
- Continuation of an ongoing annual conference

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Limitations

- Site restrictions impacted participation
- Online registration challenges noted
- Scheduling conflicts arose among committee
- Obtaining CEs for all disciplines
- Technology Challenges
- Plans to address these limitations in future iterations



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Conclusion

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Interprofessional education is essential for addressing healthcare disparities and improving outcomes. By prioritizing team-based learning and collaborative problem-solving, healthcare professionals can enhance rehabilitation strategies and outcomes for underserved populations.

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Key Take Aways to Share

Team Up and Tune In:

- Connect with the gurus of every field—education, tech, and trending topics. Collaboration is key!

Wranglers for the Win:

- Harness the talent of those who can corral big ideas into actionable plans. Everyone needs a "to-do" champion!

Short and Snappy Meetings:

- Catch up early and often! A series of quick huddles trumps lengthy, rare gatherings.

Action Items Ahoy!:

- Wrap up every meeting with clear action steps. Leave with purpose and a plan!



Burke et al., 2020; Davis, 2022

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Hybrid Teaching Hacks: Gadgetry Galore!

- **Presence Punch:** On-site participants showed more enthusiasm than remote learners, yet both excelled conceptually.
- **Tech Tango:** Effective hybrid classes require high-quality audio, video, and interactive tools to engage remote students.
- **Design Drama:** Classroom setup and social interaction enhance participant enthusiasm, with teamwork fostering community spirit.
- **Teacher Twists:** Instructors enjoy the real-time interaction of hybrid classes compared to fully online formats.
- **Hurdle Hustle:** Remote learners may feel isolated due to tech issues, and teachers struggle to gauge understanding in remote-only settings.
- **Future Fusion:** Hybrid learning should blend various teaching methods, social interaction, and technology for optimal education. Live engagement tools are essential for keeping participants engaged in large classes or livestreams.



(Raes, 2022)

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Your Turn

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Brainstorm partners

Good team members, frequent collaborators, local experts, CEU coordinators

Brainstorm platforms

Local universities, online platforms

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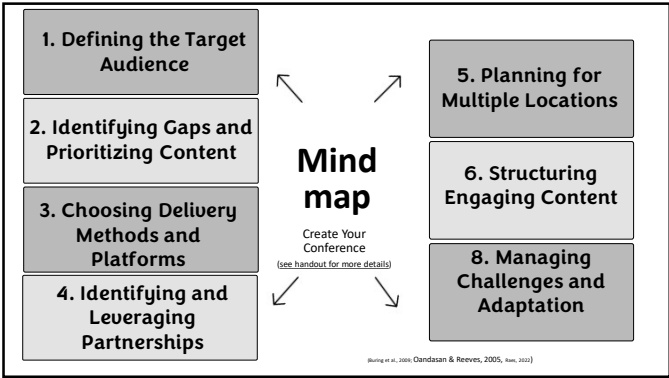
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**Questions?**

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