

# CONVERGENCE: An IPE model for sustainability, institutional integration, and inter-institution collaboration

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## Abstract

### Background:

One of the major barriers for interprofessional education (IPE) is sustainability. In its sixth year, Convergence, has established sustainable IPE at the University of Texas Southwestern Medical Center (UTSW). The Convergence model can provide a template for sustainable IPE for other institutions.

### Methodology:

Convergence conducted **annual IPE activities** utilizing **small interprofessional student groups** (medical, nursing, physician assistant, physical therapy, prosthetics-orthotics, clinical nutrition, rehabilitation counseling, radiation therapy). The activities focused on **foundational interprofessional competencies** including identifying roles and responsibilities, communication and teamwork. A science of medicine or a clinical topic (i.e. obesity and metabolism, aging) provided a **medical theme for activities**.

### Results:

After a mandatory five-years, Convergence received additional institutional financial support to continue IPE. Convergence also provided IP competencies for multiple programs' accreditation requirements. Additional IPE/IPP activities were able to scaffold on the IP educational foundations and utilize established IP student groups (i.e. an interprofessional student rotation at a nursing home, an interprofessional interview with a healthy elderly person, a clinical skills activity on team-based disclosure of a medical error). Convergence also provided the educational anchor to introduce first year students to basic TeamSTEPPS concepts. Additionally, Convergence was able to show significant knowledge gains from students in the annual science of medicine themes. Finally, Convergence collaborated with Texas Women's University, to bring nursing students and facilitators into the interprofessional activities.

### Conclusion:

Convergence has successfully: garnered administrative support; established intra-institutional integration; provided foundational support for additional IPE/IPP activities; and cultivated inter-institution collaboration. The Convergence model can provide template for sustainable IPE for other institutions.

## Background

One of the major barriers for interprofessional education (IPE) is sustainability. In its sixth year, Convergence, has established sustainable IPE at the University of Texas Southwestern Medical Center (UTSW). **The Convergence model can provide a template for sustainable IPE for other institutions.**

## Methodology

### The first five years...

Convergence conducted annual IPE activities utilizing small interprofessional student groups (medical, physician assistant, physical therapy, prosthetics-orthotics, clinical nutrition, rehabilitation counseling, radiation therapy and graduate biomedical science). The activities focused on foundational interprofessional competencies including identifying roles and responsibilities, communication and teamwork. A science of medicine or a clinical topic (i.e. obesity and metabolism, aging) provided a medical theme for activities.

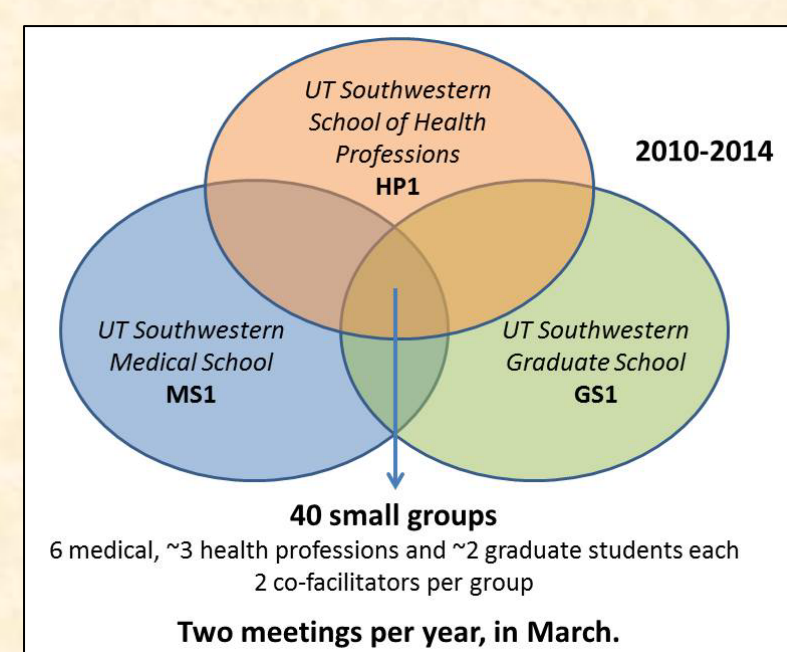
### Annual IPE Activities

Groups met twice in March to:

- 1) learn roles & responsibilities communication styles and selected teamwork skills, and
- 2) simulate a team meeting on the annual science-of-medicine theme.

### Small Interprofessional Student Groups

Convergence groups were based on the forty small groups of the Academic Colleges in the medical school and their physician mentors with the addition of students from health professions and graduate school, plus a facilitator from either health professions or graduate faculty.



## Methodology

### Foundational Interprofessional Competencies



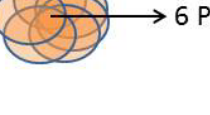

- 1) Understanding of and respect for the roles of other health professionals,
- 2) Enhancing interprofessional communication skills, and
- 3) Increasing knowledge of effective teamwork.

### Medical Theme for Activities (i.e. obesity and metabolism, aging).

Refer to poster *CONVERGENCE: Science-of-medicine themes as content drivers for interprofessional education*.

### Curricular Integration of IPE

All three schools adopted a common schedule allowing students to meet together.

	Professional Development Course/Learning Community	Meeting Time
	<b>Academic Colleges</b> (Clinical Skills, Ethics and Professionalism)	40 groups meet every Wednesday, 1-2:30 PM
	<b>IDEAL</b> (Interprofessional Development, Education & Active Learning)  → 6 Programs	13 groups meet 1 <sup>st</sup> & 3 <sup>rd</sup> Wednesday, 12-1:30 PM Plus a monthly Lecture Series
	<b>RCR</b> (Responsible Conduct of Research)	7 groups meet 1 <sup>st</sup> & 3 <sup>rd</sup> Wednesday, 12:30-2 PM



Keynote speaker, Dr. Dan Kastner, meets with a Convergence group to discuss the case study of PAPA syndrome on Convergence Day for *Innate Immunity*. (2014)



Scoliometry education and measurements by physical therapy students on Convergence Day focused on *Marfan syndrome*. (2013)

## Results

### After five years...

#### Administrative Support

Convergence received additional institutional financial support to continue IPE.

#### Fulfill Program Accreditation Requirements

Convergence provided IP competencies for multiple UTSW programs' accreditation requirements.

#### Additional IPE/IPP activities

Additional IPE/IPP activities, coordinated through the Southwestern Aging & Geriatric Education (SAGE) Program, were able to scaffold on the IP educational foundations and utilize established IP student groups.

- 1. Interprofessional student rotation at a nursing home**
  - Aging theme and IP roles and responsibilities
  - 1<sup>st</sup> year health profession students with 2<sup>nd</sup> year medical students
- 2. Interprofessional interview with a healthy elderly person**
  - Aging theme and IP roles and responsibilities
  - Convergence groups and facilitators
- 3. Clinical skills activity on team-based disclosure of a medical error**
  - Aging theme and IP roles and responsibilities
  - IP communication skills and teamwork
  - UTSW medical and health profession students with University of Texas Arlington College of Nursing students

## Results

### Provide Educational Anchor

Convergence also provided the educational anchor to introduce first year students to basic **TeamSTEPPS®** concepts.

### Assessment and Outcomes

Formal assessment of the impact of Convergence was carried out by administration of a pre- and post-Convergence Knowledge and Attitude Probe. Knowledge questions pertained to the year's science-of-medicine theme and attitudes were assessed with versions of the Readiness for Interprofessional Learning Scale (RIPLS) and the Professional Identity Scale (PIS). In addition, both students and faculty were surveyed after Convergence Day, to obtain feedback on specific activities via Likert-scaled questions, as well as comment boxes. Importantly, feedback was used to improve Convergence every year.

**Significant Knowledge Gains** - Refer to poster *CONVERGENCE: Science-of-medicine themes as content drivers for interprofessional education*.

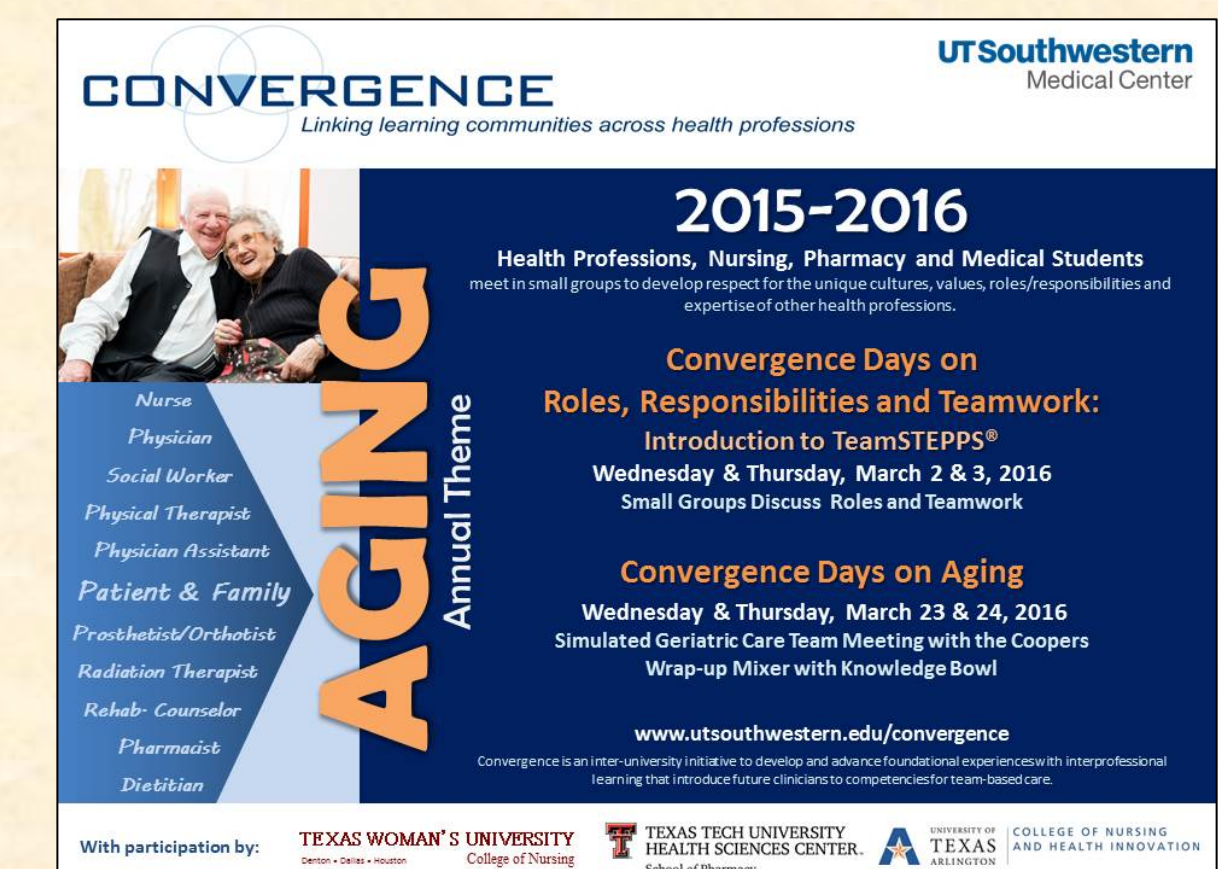
**Significant Attitude Gains** - Convergence was able to show significant attitude gains in the areas of teamwork and collaboration, and roles and responsibilities.

Assessments	2009-2010			2010-2011			2011-2012			2012-2013			2013-2014		
	MS	HP	GS	MS	HP	GS	MS	HP	GS	MS	HP	GS	MS	HP	GS
Professional Identity Scale (PIS)	<0.001	0.006		0.001	•		•	•	0.018	•	•	•	•	•	•
Readiness for Interprofessional Learning Scale (RIPLS)															
Teamwork and collaboration	0.006	0.033		0.022	•		•	•	•	•	0.002	•	•	•	•
Interprofessional identity	0.022	0.006		•	•		•	•	•	•	•	•	•	•	•
Roles and responsibilities	0.001	0.028		<0.001	•		•	0.05	0.009	<0.001	•	•	•	0.05	•
Graduate school truncated version of RIPLS			•			•									

Attitude gains were assessed by two scales as indicated. In the first two years, graduate students took only a truncated version of the RIPLS, after which they participated in the standard probe. School abbreviations: MS, medical school; HP, health professions school; GS, graduate school. • No significant gain in attitudes, however pre-scores were high and remained high in post-scores (>4 on 5 point Likert scale); • No significant gain in attitude scores; ○ Decrease in attitude scores to <4 on a 5 point Likert scale.

### Collaboration with Additional Institutions

Convergence is collaborating with Texas Women's University, The University of Texas Arlington and Texas Tech University Health Sciences Center to bring nursing and pharmacy students and facilitators into the IPE activities.



## Conclusions

Convergence has successfully:

- garnered administrative support,
- established intra-institutional integration
- provided foundational support for additional IPE/IPP activities, and
- cultivated inter-institution collaboration.

**The Convergence model can provide template for sustainable IPE.**