

Making Geriatric Education Relevant to All Medical Students: The Aging for Specialists Conference

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Our changing sociodemographics mandate that all future physicians know how to care for our aging population; however, medical students anticipating careers in specialty fields often underestimate the relevance of aging care. We developed a one-hour program to: 1) stimulate student recognition of specialty geriatrics; 2) build an aging-sensitive culture; and 3) demonstrate specialty programs' interest in geriatrics. Our Medical Students' Aging for Specialists Conference (MSASC) gives students an explanation of the impact of aging on clinical practice and includes discussions facilitated by specialty department heads and specialty-specific Aging Pearls fact sheets. This innovative and easily replicable conference generates interest and knowledge in caring for seniors by students interested in specialty medical careers.

Background

By the year 2050, 20% of the U.S. population will be over the age of 65.¹ Although individuals aged 65 years and over now account for only 13% percent of the total population, they comprise 37% of hospital discharges and 43% percent of hospital days (2007),² and many will require specialty medical care. Nearly all specialties have substantial and growing proportions of elders on their panels,³ making knowledge of common geriatric conditions and syndromes imperative to good clinical outcomes. Initiatives are underway to increase geriatrics training for medical students in primary and specialty-non-primary care disciplines, led by Reynolds and Hartford Foundation programs at premier institutions across the U.S.^{4,5} Nonetheless, many surgeons and related medical specialists remain poorly prepared to provide quality care to these elders, and even with successful integration of geriatric principles, there is insufficient recognition of the importance of this knowledge by medical students.⁶ As adult learners, there is concern that unless medical students appreciate the importance of geriatric principles of care as related to their anticipated career paths, the integrated geriatric curriculum will not be embraced.⁷ The University of Arizona *Medical Students' Aging for Specialists Conference (MSASC)* is a conference that addresses both issues, putting the spotlight on the importance and excitement of caring for seniors by specialists and students interested in specialty training.

In 2006, the University of Arizona College of Medicine in Tucson, AZ introduced a new curriculum, titled Arizona Med, integrating basic and clinical sciences in the first two years of study. At the same time, the University of Arizona College of Medicine received a

Donald W. Reynolds Foundation Aging and Quality of Life Program grant to help integrate aging content into the curriculum, with a focus on the training of surgeons and related medical specialists and their trainees in geriatric care. *The Medical Students' Aging for Specialists Conference* was an integral part of the proposed program objectives. The objectives of this paper are to describe this conference, to provide links to the materials necessary to mount this conference, and to present information regarding program dissemination.

Methods

MSASC Planning, Preparation and Program Description

Planning meetings were held with the Arizona Reynolds Program of Applied Geriatrics' (ARPAG) interprofessional aging content and curricular faculty experts, who designed program objectives and methods. Medical Students' Aging for Specialists Conference (*MSASC*) Curricular Objectives were: By the end of the one-hour lunch conference, students and specialty faculty will be able to:

1. Explain how our rapidly aging society will impact on the general practice of medicine in the future
2. Discuss three specific age-related facts in the specified specialty
3. Debate the need for gero-specialty expertise to achieve quality outcomes in the care of older patients.

Objectives were reviewed and refined with input from the University of Arizona's Medical Student Section of the American Geriatrics Society (AGS). The student planning committee felt that an important attraction for the medical students to attend this elective conference (a critical element to achieve the attendance we desired) was the

opportunity for the students to participate in a small group discussion with the department chair of their potential specialty career choice. The University of Arizona College of Medicine Dean and the Dean of Student Affairs were involved early in the process to encourage all department chairs and program directors to participate-- key to the program's success. A date was selected with an eye towards not competing with other events, and a nationally known geriatric scholar was selected to provide the keynote address. A personalized request to participate, inclusive of program objectives, was sent via email to medical and surgical specialists, primary care department chairs, program directors, and key institutional leaders. Follow-up phone calls were made by the ARPAG Director/ Section Head of Geriatrics and Gerontology.

The Student Section of the AGS designed the flyers and sent list-serve email invitations to their 1st and 2nd year medical student peers. In addition, reminder emails were sent the day before, and student AGS representatives stood outside classrooms to encourage students to attend the event and advertise the free lunch.

The room set-up consisted of a large conference room with 12-14 tables grouped to seat 1-2 faculty members from each participating department and 8-16 students per table. Each table had a clear sign indicating the specialty so that the entering students could select the table of their choice, and the faculty participants (department chairs and program directors) sat at their assigned tables. Box lunches were provided for all participants. Participation of faculty and students was tracked.

Evidence-based *Aging Pearls* fact sheets were prepared by a geriatrician informationist for each specialty, along with specialty-specific questions related to the epidemiology, diagnosis and treatment of diseases falling within the purview of each respective specialty. These questions (with answer sheets) were provided to help prepare faculty participants and support their geriatric content knowledge in advance of the event. These same discipline specific sheets were made available at the event at the relevant table.

The event began with a 15 minute targeted lecture by a nationally respected visiting professor to explain the impact of aging demographics on future specialty clinical practice. Dr. John Burton key-noted the initial Conference (available online at <http://www.reynolds.med.arizona.edu/EduProducts/podcasts/StudentConference.cfm>). The *Aging Pearls* fact sheets were used as guides to informal table discussions between participating Department Heads and/or Program Directors, and students interested in their selected specialty. These conversations lasted 40 minutes, with MSASC planning faculty circulating to observe interactions and assist if questions arose.

Because this was a one-hour, compact program, our evaluation was short, as well. Paper and pencil evaluation forms were provided at the end of the program and encompassed five closed-ended Likert-type questions rated on a 1-5 scale, and two open-ended questions (see Tables 2 and 3).

MSASC program costs (less salaries) included materials (\$100 for copies, evaluation, pencils, facilitator name tags, program flyers and program brochures), and lunches (\$10 per person for lunch and beverage). Keynote addresses were given by national

geriatrics scholars, who were able to combine their visit with other professional objectives --making the keynote address a "value-added" activity, with no additional cost. Other MSASC program resources used to plan, implement and evaluate this program included:

1. 20 hours of program coordination including correspondence with program directors and AGS student section program facilitators, preparation of materials, coordination of room and lunch, and set-up.
2. 10 hours of Geriatric program director time, including correspondence and follow-up with program directors, program oversight and attendance.
3. 40 hours for the geriatrician/informationist to prepare the *Aging Pearls* fact sheets.
4. 5 hours of evaluator time to prepare evaluation forms, data enter and analyze.

All programmatic planning and curricular materials, including updated *Aging Pearls* fact sheets, have been posted at the Portal of Geriatric Online Education (POGOe), and are available free of charge at: <http://www.pogoe.org/productid/20602>. In addition, authors are gladly willing to provide program planning assistance to assure fidelity to this innovative model through the University of Arizona Geriatric Education Center (<http://azgec.med.arizona.edu>) or the University of Arizona Reynolds Program in Applied Geriatrics (<http://www.reynolds.med.arizona.edu/index.cfm>). Consultation for dissemination was provided to interested universities.

Results

This conference was initially held at the University of Arizona in 2007 (98 student attendees), and repeated in 2008 (101 student attendees), 2009 (110 student attendees), and twice in 2011 (53 student attendees in April; 96 student attendees in Sept). Over the four years of the MSASC, 24 departments have participated; many for multiple years (see Table 1). In addition to expected specialties such as anesthesia and emergency medicine, more recent years have seen the introduction of radiation oncology and pediatrics.

Table 1 University of Arizona Reynolds Program; Medical Students for Specialists Conference	
Participating Departments at University of Arizona and UT Southwestern	
Anatomy ²	Neurology ^{3,5,6}
Anesthesiology ^{1,2,3,4}	OB/Gyn ^{1,2,3,4}
Biology of Aging Research ⁴	Ophthalmology ^{3,4,5,6}
Broad Medical Vision ⁴	Orthopedics ^{3,4,5,6}
Cardiology ^{1,3}	Pathology ^{5,6}
Emergency Medicine ^{1,2,3,4,5,6}	Pediatrics ^{3,4}
Family and Community Medicine ^{2,3,4,5,6}	Psychiatry ^{2,3,4,5,6}
Gastroenterology ^{2,3}	Radiology ^{3,4}
Gynecology ^{5,6}	Radiation Oncology ⁴
Geriatrics ²	Surgery, Dermatology ³
Infectious Disease ^{1,2,3}	Surgery, General ^{1,2,3,4,5,6}
Internal Medicine ^{1,3,4,5,6}	Surgery, Orthopedic ^{1,2}
Nephrology ¹	Urology ^{1,3,5,6}
¹ University of Arizona 2007	⁴ University of Arizona Apr. and Sept. 2011
² University of Arizona 2008	⁵ UT Southwestern 2009
³ University of Arizona 2009	⁶ UT Southwestern 2010

Dissemination

In late 2008, University of Arizona Reynolds' Program faculty met with geriatricians at the University of Texas (UT) Southwestern Medical Center to help UT Southwestern plan a program similar to Arizona's Aging for Specialists Conference. Southwestern first imported this activity in 2009 (68 student attendees), and held a second conference in 2010 (108 student attendees). The program followed a similar format to the one at the University of Arizona. Department chairs and residency program directors were invited to attend and utilized the *Aging Pearls* developed at the University of Arizona. The Chief of the Geriatrics Section sent a personal invitation 6 months in advance to department chairs and residency program directors. The invitation referenced the 2008 Institute of Medicine Report, *Retooling for an Aging America, Building the Healthcare Workforce*⁸ and stressed that the goal of the program was to: "strengthen physician training in the care of the elderly regardless of specialty choice". The title of the UT Southwestern program was modified to the *UT Southwestern Aging for All the Specialties* conference. Medical students received invitations by email approximately 6 weeks before the conference. The email emphasized the importance of geriatrics regardless of career choice, as well as outlined the opportunity to have lunch with the department chairman or residency director of the student's specialty of choice. Students were asked to list their top three specialty preferences prior to the meeting, with tables assigned on a first come, first served basis to help motivate early responses.

Evaluation

The University of Arizona program was not evaluated in its initial two years; however, it was evaluated in subsequent years. We were able to achieve an average 94% response rate for the reported two years of evaluation. Aggregate respondent data are summarized in Tables 2 and 3. UT Southwestern modified their evaluation as shown in Tables 2 and 3.

Table 2 Medical Students for Sub-Specialists Conference: Aggregate Evaluation Data

Question	University of Arizona ¹		UT Southwestern ²	
	mean	std dev	mean	std dev
1. Overall Impression (was it worth attending?)	4.54	0.578	4.47	0.608
2. Keynote Address	4.47	0.678	4.34	0.744
3. Roundtable Discussions	4.69	0.577	4.84	0.399
4. Specialty Handout Sheets		0.760	-	-
5a. ¹ How much new information did you learn about providing care for older adults?	4.16	0.830	-	-
5b. ² Did you learn new information about providing medical care to older patients?	-	-	Yes = 95.9% No = 3.0%	
6. ² Would you recommend this conference to other medical students?	-	-	Yes = 99.4% No = 0.6%	
Questions 1-4: 5=Excellent; 1=Poor				
Question 5a: 5=A lot; 1=None				
¹ University of Arizona 2009, April 2011, and September 2011 evaluations; N=240				
² UT Southwestern 2009 and 2010 evaluations; N=169				

Overall responses were good (4) to excellent (5), with a mean response of 4.08 to 4.74 out of an available 5 (excellent) score. The roundtable discussions were enjoyed most, with the keynote address second. The biggest complaint was "not enough time for roundtable discussions." Response from faculty participants was enthusiastic, with several program directors sending unsolicited laudatory emails.

Table 3 Medical Students for Sub-Specialists Conference: Open-Ended Comments

What did you enjoy most?	University of Arizona ¹	UT Southwestern ²
Keynote address	13.6%	10.6%
Roundtable discussions	77.9%	80.3%
Geriatric pearl sheets	4.26%	7.6%
Everything/Great	4.26%	-
"Great time hearing about a given specialty and how aging will affect future practice" – UA student, 2011		
"I enjoyed hearing a non-geriatrics physician actually discuss how geriatrics was related to his daily work" – UT Southwestern student, 2010		
What did you enjoy least?	University of Arizona ¹	UT Southwestern ²
Not enough time	27.9%	22.4%
Hard to hear	7.87%	5.2%
Too crowded	5.5%	17.2%
Nothing/all great	38.2%	12.1%
"Condensing to one hour is tough, table discussions had to be rushed" – UA student, 2009		
"Would prefer smaller groups, hard to hear the faculty member unless you were sitting in close vicinity" – UT Southwestern student, 2010		
¹ University of Arizona 2009 April 2011, and September 2011 evaluations		
² UT Southwestern 2009 and 2010 evaluations		

Challenges

In lieu of a fall 2010 event, the University of Arizona held the event in April of 2011, during a time of heavy exams. This had a mixed effect. Fewer students attended, but those who did shared in more intimate interchanges with attending faculty members. Three faculty members who had previously participated in this event spontaneously shared how much they enjoyed the rare small group discussions with the medical students.

Discussion

The University of Arizona *Medical Students' Aging for Specialists Conference* is a conference that highlights the importance of geriatric specialty care. In many respects this activity is an example of extending the "the new frontier," which was first explored in the context of graduate medical education approximately 10 years ago.⁹ In addition to the educational benefits to the students, this "stealth" teaching activity reinforces through lecture, evidence-based *Aging Pearls* fact sheets, and small group discussions, the importance of specialty geriatric care to all primary and specialty practitioners.

This activity may promote geriatric integration into academic medical center culture through heightened awareness of geriatric specialty issues, as well as enhance deeper geriatric education, training, and research collaboration. The *MSASC* is easily exportable to other medical school settings, as evidenced by dissemination to UT Southwestern, is well-regarded by students and specialists alike, and is best used as a strategic component of a comprehensive geriatric education and training program.

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