



National Center for Rural Health Professions

Developing a Primary Health Care Workforce in Rural Illinois



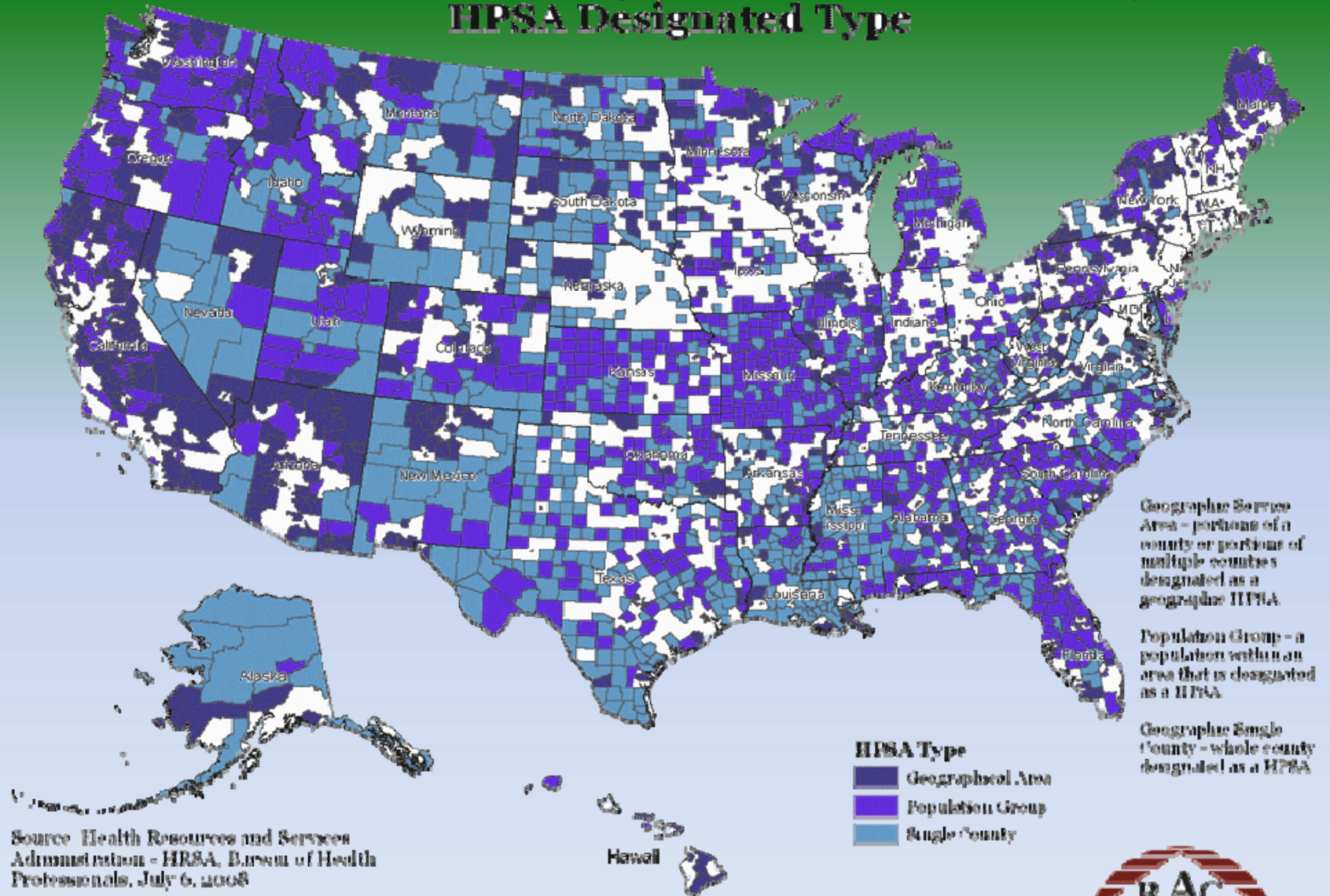
THE NATIONAL CENTER FOR
RURALHEALTH
PROFESSIONS

MISSION: To Promote The Health of
Rural Communities Through
Partnerships In Education, Service,
Research And Policy

National Workforce Shortages

- Doescher and colleagues (2009) estimate that a 30% or greater increase in primary care workload by 2020, paired with a 7% increase in supply, at best, translates to a shortfall of 35,000 to 44,000 primary care providers nationally
- In 2005, there were 55 primary care physicians for every 100,000 people in rural areas, compared to the 95 per 100,000 that are needed (Steinwald, 2008; Fordyce, 2007)

Health Professional Shortage Areas (HPSA) - Primary Health HPSA Designated Type



Source: Health Resources and Services Administration - HRSA, Bureau of Health Professions, July 6, 2008

Note: Alaska and Hawaii not shown to scale



Illinois Workforce Shortage

- 83 Rural Counties in Illinois
 - Nearly 20% of Illinois residents live in rural counties
- 82 of the 83 Rural Counties in Illinois, have some form of Health Professional Shortage Area (HPSA) designation
 - 82 have Primary Care HPSAs
 - 68 have Dental Health HPSAs
 - 77 have Mental Health HPSAs

Illinois Workforce Shortage

- The state of Illinois is short approximately 280 FTE health professionals
 - 132.5 FTE primary care (MDs or DOs with a specialty in Family Medicine, Internal Medicine, Pediatrics, or Ob/GYN professionals.
 - 101.5 FTE dental health professionals (DD or DDS)
 - 46 FTE mental health professionals (Psychiatrists)
- County needs range from .5 FTE to 11 FTE health professionals

NCRHP's Response to the Challenge

- Develop medical and health education programs that offer special curricula on rural healthcare delivery
- Create programs that focus on the early identification and recruitment of students who will be more likely to pursue medical and health professions careers in rural areas
- Overall, implement an approach that combines strategies through attention to the 4 key components of health professions education programs: recruitment; curriculum; support; and evaluation

NCRHP's Pipeline of Rural Health Workforce Programs

Elementary & Middle School Students	High School Students	College Students	Health Professions Students	Rural Health Professionals
4-H Health Jam	Health Careers Talks	Shadowing	Southern and Northern Exposure Tours for RMED M1 and RPHARM P1 students	Provide Health Career Talks
Health Career Talks	Rural Health Careers Camps	Rural Health Experience: 3-day	Rural Health Professions add-on curriculum	Provide Shadowing Opportunities for students
	Shadowing	Health Professions Preceptorship: 6 weeks	16-18 week Preceptorship in rural community with PCP or pharmacist for RMED/RPHARM student	Rural Preceptor for RMED/RPHARM students
			COPC Project for RMED and RPHARM students Health Professions Preceptorship: 6 weeks	Collaborating Rural Hospital Serve on Advisory Committees for various rural health workforce grants



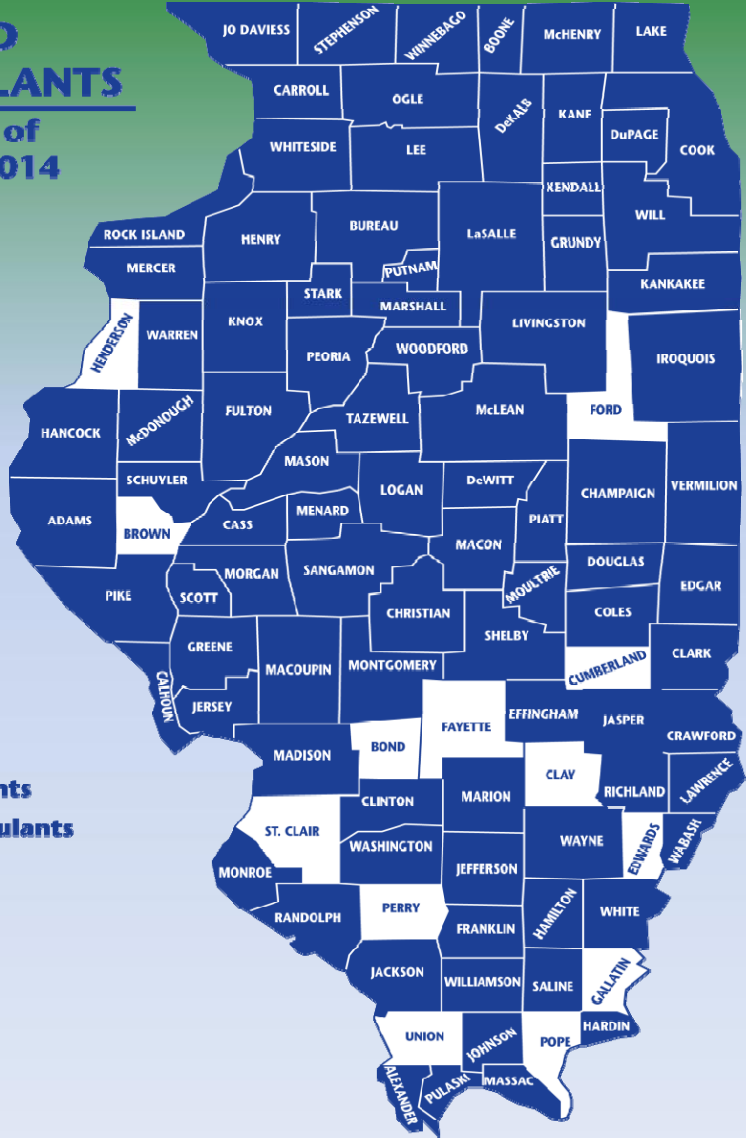
Mission

The Rural Medical Education (RMED) Program at the University of Illinois Rockford seeks to admit and prepare medical students from the state of Illinois who will, upon completion of residency training, locate and practice in rural Illinois as primary care physicians

Admissions Process

- Apply to UIC Medical School (AMCAS) or UIC Pharmacy School (PharmCAS)
- Complete RMED/RPHARM additional 'rural' application and send by December 1st (three letters of recommendation)
- Applications screened by committee in December
- Interviews in January for candidates by Recruitment & Retention Committee (focus on primary care and rural intent)
- If selected, name presented to admissions committee in Chicago for admission as RMED or RPHARM student
- Admitted or Denied by the College

RMED
MATRICULANTS
Classes of
1997 - 2014



- Matriculants**
- No Matriculants**



Health Professions Students: Learning Components

- Rural Health Professions add-on curriculum
- Southern and Northern Exposure Tours for RMED M1/M2 and RPHARM P1/P2 students
- 16-18 week Preceptorship during 4th year in rural community with PCP or pharmacist for RMED/RPHARM student
- COPC Project for RMED and RPHARM students
- Rural Interdisciplinary Health Professions Preceptorship – 6 weeks



Piggy Back Education

- The Rural Health Professions curriculum is a supplemental curriculum. Training for RMED & RPHARM is in addition to the regular curriculum at the University of Illinois – Rockford
 - Specialized experience
 - Unique training
 - Better preparation for rural primary care practice
 - More competitive residency profile

RHP Curriculum

RHP Course	Curriculum Focus	Methods	Contact Hours
RHP Year One	Rural health issues, community resources, intro to COPC, rural leadership and negotiation skills	RMED/RPHARM new student orientation, seminars, case-based small group discussions, field trips, optional rural health conferences, shadowing rural family physician for a day, selected readings and assignments	~2 day orientation 7-9 monthly evening dinner seminars (3 hrs/month) 1-2 day field trips 1-3 day conferences informal feedback session
RHP Year Two	Core concepts of primary care medicine and pharmacy, community resources team approaches to health care, practice-based issues	Seminars, case-based small group discussions, rural health conferences, group presentation of annotated bibliography on a rural health topic, optional conferences and workshops, selected readings and assignments	9 monthly evening dinner seminars (3hrs/month) 1-2 day field trip 1-3 day conferences informal feedback session

RHP Curriculum

<p>RHP Year Three</p>	<p>Concepts of community-based medicine/ pharmacy and COPC, core concepts of pc medicine and pharmacy vis-à-vis M3 curriculum and rural practice</p>	<p>Seminars, small group discussions, Acommunity health survey, @ Awindshield analysis, @ design COPC project, selected readings</p>	<p>9 monthly evening dinner seminars (3 hrs/month)</p>
<p>RHP Year Four</p>	<p>Clinical skill development in rural settings, community structure study, implementation of COPC project in rural community</p>	<p>Immersion experience. 60% clinical responsibilities; 40% community projects, which include collaboration with community individuals / organizations - Log clinical encounters into computer database; present COPC project in Poster Session; compile community notebook</p>	<p>16-week preceptorship in rural Illinois community working with a rural primary care physician or pharmacist</p>

4-H Jam



Clay Ford from Harrisburg, interacts with rural grade school students as they discuss how the brain and nervous system work.

No Harm on the Farm Tour



RMED/RPHARM students observe a rural emergency crew lift a tractor off a farmer during a mock roll-over accident during the farm tour.

On the Road with Southern Exposure



Rural Health Workforce Development
Program HRSA Award No. 1
G98RH19825-01-00

RMED/RPHARM Means “Hands On”



“What sold me on the RMED Program was the hands on experience I get with this type of education. As RMED students move through their education, there aren’t as many people in that complex hierarchy between you, the physician and the patient. I will get more experience working with patients and have better access to physicians who can share their wisdom that comes with experience.”

Elle Geddes-RMED

M4/P4 Preceptorship and Community Service

Statewide Distribution of Rural Preceptorship Sites

25 collaborating rural hospitals

36 rural teaching physicians

8 Rural teaching pharmacists

Collaborating Hospitals

1. Anna
2. Centerville
3. DeKalb
4. Dixon
5. Fairfield
6. Freeport
7. Galena
8. Galesburg
9. Gibson City
10. Herrin
11. Litchfield
12. Macomb
13. Marion
14. Marshall/
Terre Haute
15. Mattoon
16. Metropolis
17. Monticello
18. Murphysboro
19. Ottawa
20. Pittsfield
21. Pontiac
22. Princeton
23. Robinson
24. Spring Valley
25. Watseka



COPC Projects

- Project Categories
 - Health Education/Promotion
 - Access and Healthcare Utilization
 - Environment and Organization of the Community
 - Illness and Disease in Rural Communities
- Community-based
- Student-centered
- Population-focused

COPC Makes a Difference

- Kid Farmers: Age Appropriate Tasks on the Farm
- Macoupin County Kids Against Tobacco
- Medical Translation for High School Spanish Students
- Barriers to Diabetes Care
- Women of Bureau County: Obesity and Health Promotion
- Methamphetamines in Our Backyard
- Hospice Services in Rural Illinois
- Assessing Geriatric Depression in a Rural Community



How do you Know if you
Have Really Grown Your
Own?

Evaluation of Health Professions Student Activities

- Overall Curriculum and Program
 - Longitudinal Community Health Survey (1st and 4th years)
 - Exit Survey at graduation
 - Gather demographic data and contact information for long-term tracking
- 16-18 Week Preceptorship in rural community with PCP or pharmacist
 - Pre/Post skills assessment
 - Evaluation by preceptor
- COPC Project for RMED and RPHARM students
 - Present Project at Research Day
 - Instructor graded
- Rural Interdisciplinary Health Professions Preceptorship – 6 weeks
 - Pre/Post attitudes and knowledge surveys
 - Focus Group evaluations
 - Gather demographic data and contact information for long-term tracking

How Is Doing?

- RMED Applicants from 95% of Illinois' rural counties
- 294 students (Classes of 1993-2016)
- Matriculants from over 80% of Illinois' rural counties
- 227 graduates (164 in practice; 62 in residency training)
- 66 students in medical school
- 80% of graduates attend primary care residencies
- 75% of graduates in Illinois practicing in towns less than 20,000 people
- RMED graduates practicing in 78 Illinois towns
- 84% of graduates in Illinois practicing primary care medicine
- 62% of RMED graduates practicing in Illinois are within 60 miles of their hometown

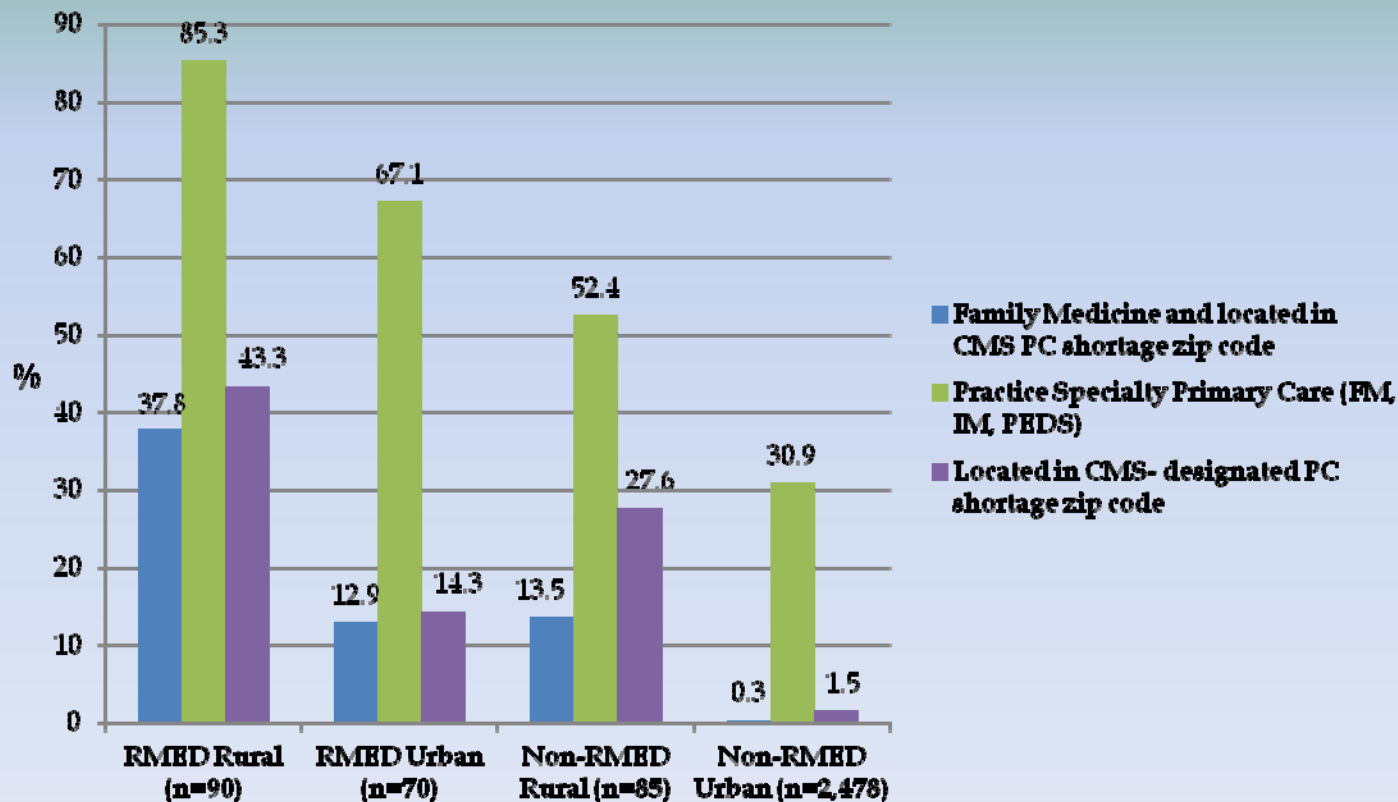


RMED grads receive the traditional symbol of rural
America –
the John Deere tractor!

Outcomes

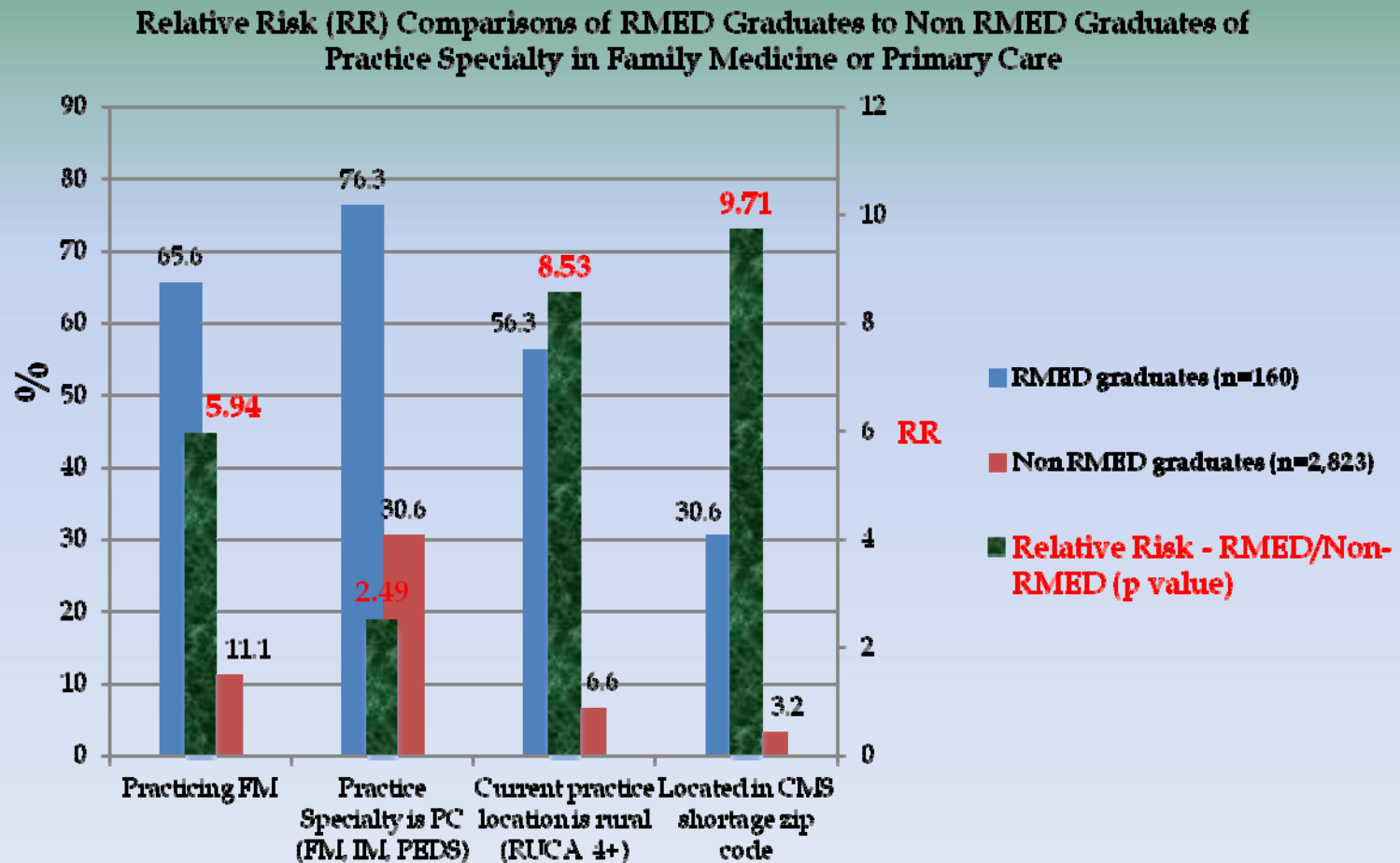
University of Illinois RMED graduates are significantly more likely than non RMED University of Illinois graduates to be practicing Family Medicine in a CMS shortage location, be practicing primary care (FM, IM or PEDS), regardless of specialty be in a CMS shortage location. Rural RMED vs. Non RMED comparisons are statistically significant, $p < .05$.

Practicing RMED and Non RMED Graduates by Specialty and Location, Univ. of IL COM, Classes 1997-2007



Outcomes – Overall Comparison

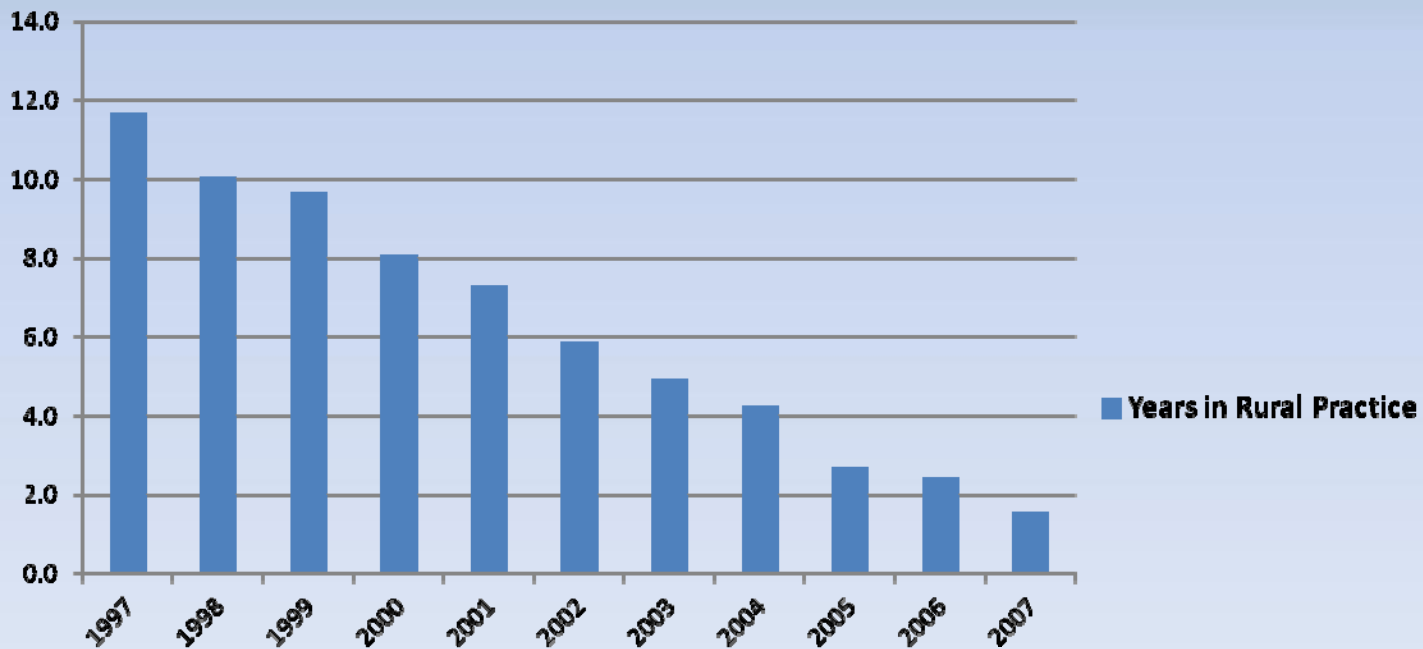
Comparison of the Relative Risk (RR) of practicing FM, Primary Care, in rural location, or CMS shortage location indicates that the changes of these outcome are substantially higher for RMED graduates than non RMED graduates, ranging from 2.49 times higher related to primary care to 9.7 times higher related to practice in a CMS shortage area. All RR comparisons are **statistically significant**, $p < .001$.



Retention Outcomes - Years in Rural Practice

Average years in rural practice is consistent with time since completion of residency among RMED graduates. Of the 160 graduates, 84 have continuously practiced in a rural location since completion of training.

**Average Years in Continuous Rural Practice,
RMED Graduates Classes 1997-2007, n = 84**



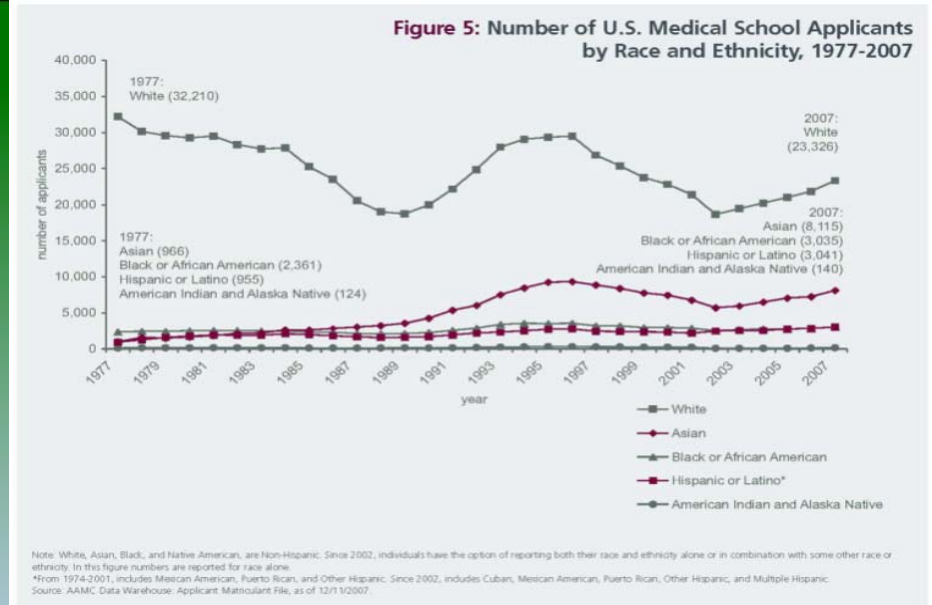
Success at Its Best



National Center for Rural Health Professions

Sampling of Other Projects

Native American Pathway



- Outgrowth of Kellogg RPRP grant initiative
- Promote health careers opportunities for Native Americans
- Met with: community development groups; hospital administrators; NA students; tribal representatives – Wiyot, Yurok, Tolowa, Karuk, and Hoopa tribes (northern California); Northern Arapahoe and Eastern Shoshone (Wind River Reservation, Wyoming)
- Only program promoting rural PC and retention in tribal lands



 Elevators
Access to Annex Floors LL & 2

EXIT

Welcome

University of Illinois College of
*Native American
Pathway Project*

UNIVERSITY OF ILLINOIS
COLLEGE OF MEDICINE
AT ROCKFORD

Princess Naradhiwas University: Thailand

- 1st international medical school modeled after the Illinois RMED Program
- 'Grow Your Own' philosophy
- Meets WHO goals of implementing PHC in developing countries
- Serves as a model for rural PHC programs in other parts of the world particularly in conflict/post conflict regions
- Graduates will be honored at 2013 Network: TUFH annual meeting in Ayutthaya, Thailand

WHO Collaborating Center



Rural Health Workforce Development
Program HRSA Award No. 1
G98RH19825-01-00

WHO Collaborating Center

- Centre for Developing and Sustainable Human Resources for Health – with emphasis on PHC
- Member of Network: Towards Unity for Health – Education for Health (now located in Pune, India)
- MOU with Maastricht University: 18-week Research Clerkship
- MOU with PNU in Songkla, Thailand
- Developing MOU for a rural Illinois rotation with University of Aberdeen, Scotland