Community-Based Health Professions Education: Who Will Teach Our Students?

A Report by the NC AHEC Program

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Introduction

In recent years, there has been a great increase in concerns expressed about the availability of community based precepting sites for health professionals. At the request of UNC General Administration, North Carolina AHEC has undertaken a study of the issue with a survey of health professions schools and its own office of community education data base. In addition to a general description of the current educational environment, this report addresses three questions:

1) *What is happening to the **demand** for community-based precepting in NC?*
2) *What is happening to the **supply** of community preceptors and precepting sites in NC?*
3) *What is the **impact of changes** in the availability of community precepting on the quality of education?*

For the purposes of this report, the following terms will be used:

Community precepting: Refers to teaching students "off campus" away from an academic center and could include both outpatient and inpatient sites.

Preceptor: Any healthcare provider (nurse, physician, physician assistant, pharmacist, allied health professional….) who teaches a student(s) at their practice setting.

Preceptor site (also referred to as clinical training sites or teaching sites/practices): Refers to the setting where a preceptor is based.

This report will emphasize primary care and other outpatient teaching sites (e.g. private practices, health departments, community health centers).

Current Educational Environment for Health Professionals

All postsecondary health science schools rely on community-based health care providers to teach and mentor their students in "real life" settings. Health science programs include all undergraduate and graduate programs within the 17 campus UNC System, the 58 NC Community Colleges (*http://www.nccommunitycolleges.edu*), and 36 private schools of the NC Independent Colleges and Universities (NCICU, *http://www.ncicu.org*). Students may spend anywhere from a few days to several months with community preceptors, many of whom are not paid for their teaching role. All schools believe that such community experiences are an essential part of health professional education; many schools believe that as health care moves out of hospitals in community and ambulatory settings, education in these settings is becoming increasingly important educationally, and most believe that community based rotations in rural and underserved communities are critical to their efforts to encourage health professional students to settle and stay in the state and in areas of need.

North Carolina AHEC was founded in 1972 to support community based education, and from its inception has supported community based health care, education and housing in rural and underserved communities across North Carolina, working closely with all medical schools (at the time four) and almost all health professional programs at the university and community college levels.

Although schools and health systems vary in how many students they can place in community practices they own or manage, all schools must go outside their own systems to place students. Recognizing the importance of community based health professions education, the legislature funded an expansion of support for precepting and for regional education in the 1990s. Although total funding decreased with the loss of state revenue with the last recession, current

AHEC support of community-based education includes:

- ✓ $1 million annually in financial incentives to 2,400 community preceptors at 1,500 sites
- ✓ Annual nursing grants for development of community precepting sites
- ✓ Free preceptor access to library & information technology and preceptor development activities
- ✓ Student housing in 50 counties to enable student participation in community educational settings
- ✓ Supporting new approaches to coordinate educational activities across sites, across schools and across professions.
- ✓ Convening academic leaders from all professions to foster collaborative problem-solving around community based education.
- ✓ Support for academic centers to pilot new models/best practices of community precepting and new curricula, and to develop training for the new professions being created by changes in the health care system.

The demand for community based education has grown rapidly since the early 1990s. In 1995, AHEC Offices of Regional Primary Care Education (ORPCE) supported 700 community teaching months and grew to 4,000 months by 2005. AHEC currently facilitates community-based, primary care education for students in Medical, Nurse Mid-wifery, Nurse Practitioner (NP), Physician Assistant (PA) & Pharmacy programs at these nine institutions: Duke, ECU, UNC-CH, UNC-C, UNC-G, UNC-W, WCU, WFU, and WSSU, and is able to cover approximately half the need from these and other schools.

Over the last five years, with the passage of the ACA (health care reform) and significant shifts in the health care industry, the health care and health professional education environments have undergone further and dramatic change. North Carolina hospitals have consolidated rapidly, with the total number of independent hospitals dropping from the 120's to less than 14 in the last few years, most physicians have become employed, and EHRs have spread to virtually all hospitals and practices, significantly changing workflow and slowing down patient care. In response to an increasingly competitive environment, most integrated health systems have adopted rigid incentive plans which do not recognize any teaching component, so that practitioners who teach do so at the risk of cuts to their take home pay. Taken together, all of these fundamental changes strongly influence the structure and processes of community based education across the state.

In response to these changes, health profession schools have changed their curricula significantly—what they teach, how they teach and increasingly where they teach. In general, they are increasing the time spent in ambulatory and primary care, reflecting the overall changes in health care, while also developing new curricula in quality improvement, population health and interprofessional education.

Finally, as a consequence of these and other changes, the actual mechanics of teaching students in the community setting has become much more complicated. Onboarding of students now includes criminal background checks, providing access to and training in electronic patient records, training in HIPAA regulations, core immunizations (which vary by institution) and often screening for illicit drug use—a series of time consuming hurdles which often impact both the educational experience and often the preceptors. A recent development is that two health care systems have concluded that because of the substantial indirect costs of teaching, they must explicitly set a limit on the numbers and schools of students they teach—and one system has begun to charge a substantial fee to cover the real costs of onboarding students.

It should be emphasized that North Carolina is not alone. Our AHEC colleagues in Indiana,

New Hampshire, SC & Georgia recently presented at the National AHEC Organization (NAO) Conference on "The Emerging National Preceptor Crisis." 39 AHECs from across the country responded to their questionnaire confirming a crisis of availability of community preceptors. Two legislatures have enacted tax changes to increase the supply of teachers, and several others are considering similar moves.

Methods

We collected information from three sources. First, AHEC leadership has met with the leadership of all medical schools, all NP/DNP training programs and all PA programs several times to get their perspective on the situation. Second, we conducted a formal survey of 29 health professions schools in medicine, nursing, physician assistant and pharmacy (Appendix A) in the spring of 2016 to collect a full perspective on the issue (see Appendix B for survey questions). We had a 100% response rate. Third, we reviewed selected components of our health profession education data base. We also reviewed the literature, including two benchmark studies of precepting in NC and reviewed experiences from other states around the country.

Results

Has demand for community based precepting in North Carolina increased?

At least 8 new graduate health science schools have started since 2011, increasing enrollments by 27% (407 new students). The most rapid growth is seen in the PA profession with 6 new schools (175 students) in the last 5 years. Medicine and Pharmacy each have 1 new school and although no new graduate level nursing schools were established during this time frame many existing programs transitioned to the Doctor of Nurse Practitioner (DNP). Federal funding has supported large increases in sizes of many PA and NP/DNP programs. Based solely on enrollment data, a further overall increase of 11% in preceptor demand through FY 2018 is expected (Appendix C).

Moreover, enrollment numbers probably underestimate the increase of demand for community based rotations, given that curricula are changing to increase the amount of time in community settings. As depicted in Appendix D, **93% (27 of 29 schools) projected an increase in the need for precepting sites over the next 5 years**. Schools rated larger sites (59%) and more specialty preceptors (52%) equally as important. Although critical shortages occur in all clinical specialties and vary widely with region of the state, Ob-Gyn and Pediatrics were in most demand within the last 12 months with 24 and 18 schools respectively reporting significant challenges.

In addition, we anticipate that SARA will bring additional demand. North Carolina is viewed nationally as rich in community training sites and quality preceptors, and even though out-of-state & online programs may not have a brick-and-mortar presence in NC their students still complete on-site rotations within our 100 counties. Indeed, our survey demonstrated that the impact of out-of-state schools is already being felt, especially among NP/DNP & PA programs. In the past 12 months, 14 schools (48%) reported that out-of-state students had prevented their students from securing NC precepting sites (5 NP/DNP, 7 PA, 1 med, 1 pharmacy) and 11 schools (38%) reported their students choosing out-of-state rotations due to lack of available sites in NC (4 NP/DNP, 6 PA, 1 med).

Please note that our report and survey focus primarily on clinicians (MD/DO/NP/DNP/PA) in community settings. Increasingly, community college and pharmacy schools will be seeking rotations in the community, potentially creating further demand for experiences.

What is the available (and potential) supply of community preceptors and precepting sites in NC?

There exists no comprehensive statewide databases that include all community precepting sites, but AHEC supports community education for all professions and most schools across the state, and AHEC data are the best available on the supply of preceptors. AHEC also has provided practice support in over 1,200 practices, which provides another perspective on community precepting sites.

Importantly, despite increasing demand, the number of AHEC ORPCE sites and preceptors has remained fairly consistent over the last 10 years, averaging 1,300-1,500 sites and 2,200-2,300 individual preceptors annually. We estimate at least 70% of our teaching sites and preceptors are the same from year-to-year. Review of our practice support data base suggests that most (64% or 730 of 1,143) sites have students: thus there is at least a theoretical potential of 36% (over 400 sites) potentially available for students.

Length of community rotations vary from 1-2 days a week spread out over a semester to 4-8 week blocks (or longer) at one site. 75% (1,132 of 1,517) of AHEC sites take student(s) from only 1 university and 1 discipline; less than 6% of our sites take students from 3 or more universities or disciplines. Multiple reasons exist for sites limiting teaching to certain schools and disciplines; a major influence is alumni ties of the practicing clinicians, and another is accreditation rules for the disciplines. Increasingly schools from all professions are securing community precepting sites farther from campus and across the state.

Since teaching students represents a substantial commitment by a practice, they typically decide on how many students they will take in a given year. We observe that many practices take students for only a small part of the year—i.e., one or two 4-6 week sessions over the whole year. The limitations of our data (and time for analysis) preclude us from a firm estimate of this extra potential capacity, but we believe it will be sizable. Having students in sites for more of the year would greatly decrease the numbers of sites needed, as well as potentially improving support and development of community faculty.

What is the impact of the current crisis in community precepting?

A critical question is whether our current preceptors will continue to accept students. AHEC has conducted two major studies of preceptors across all health professions across the state in 2005 and 2011 (*"Satisfaction, motivation, and future of community preceptors: what are the current trends?" Academic Medicine, Vol. 88, No. 8/ August 2013).* This is unique data nationally because it deals with the whole state, all the preceptors across all professions in our data base (approximately 2,300), and has an acceptable response rate. There was little difference in the two surveys. In the most recent survey (2011), the vast majority of the respondents were satisfied with precepting (91.7%), anticipated continuing to precept for the next five years (88.7%), and were satisfied overall with their professional life (93.7%In these two studies). While overall differences across the professions were modest, physicians reported significantly lower overall satisfaction with extrinsic incentives.

Given the dramatic changes in the practice environment, however, will this change? How many practices will stop teaching? AHEC plans to undertake a new study of preceptors in the upcoming year. Our survey give reason for concern: 69% or 20 schools reported at least one precepting site stopped taking their students in the last 12 months. Reasons included that they were already committed to precept for other schools, incentives not adequate and health systems changes what they allowed or incented.

There is also only modest emphasis on preceptor development. Like all who teach, community clinicians who teach the next generation need both initial and ongoing development. While most schools offer or identify preceptor development resources, and all 29 schools were "Moderately-to-

Extremely" satisfied with the quality of their preceptors, only 6 of the 29 schools (21%) require specific training—and none of the 5 medical schools and most schools (66%) reported dropping at least 1 site in the past 12 months due to concerns about the quality of teaching, safety of students or that a site was unable to meet curriculum requirements.

Incentives for community preceptors, both in kind and direct financial, are currently a major concern for schools. As shown in Appendix E, most schools do provide some benefits, from continuing education to help with practice to direct financial incentives. With regard to financial incentives, although schools may not be completely transparent about this issue, we know that 27 of the 29 schools surveyed rely on some form of financial incentives to their preceptors and that furthermore, given the changes in the organization and incentives of practice, preceptors often do not receive the payments for teaching but rather it goes to the practice. For many of the schools, the payment to preceptors comes from AHEC, which is modest, at a maximum of $113/week ($450 month) for up to 40 hours contact time. AHEC does not have the funds to extend payments to any of the new schools, and a number of MD/DO, NP/PA and Pharmacy schools have begun to give significantly higher incentives.

Are financial incentives necessary for preceptors to teach? Historically, teaching students has been something done out of professionalism—it is, after all, part of the Hippocratic Oath. Given the very real impact on time and money of having students, this is still the case for almost all preceptors. However, with the huge pressures on care and finance in community settings, the issue must be raised, along with who will pay for it.

Summary and Next Steps

Our study suggests that the major cause of the emerging precepting crisis in North Carolina is a dramatic increase in demand—across health professions and both public and private. Furthermore, the precepting crisis has begun to impact educational quality and the development of educational programs. At the same time, our work with the educational leaders, the survey and experience in the field suggest a number of possibilities for improving the situation. These include increasing the supply of community based preceptors through tax deductions or credits, reducing the burden on practice by harmonizing requirements across schools, working with schools to improve preparation and ongoing development of community preceptors and helping to prepare students to help the practices.

We believe there are important strategic and policy issues to consider. Community precepting is critical to the interests of the state in recruiting and retaining its health professionals. This is increasingly true as health care continues to move from hospitals into communities. Yet the sites of training—the community practices—are in a state of dramatic change, and that change is impacting education significantly.

We recommend development of a task force to review options and policy for going forward. Key issues include establishing the policy goals for the state, including reassessing the value and importance of aligning public and private institutions as well as universities and community colleges, the need for tracking the problem, and addressing the impact of rapidly escalating student loan debt. In addition, the UNC system should explore specific policy solutions, such as the tax deductions and credits legislated by other states, engagement of health care systems and payers, regional coordination, housing capacity, systematic programs for development of both preceptors and students, student loans and the need for curricular innovation in how to teach in the community setting across schools and professions.

North Carolina AHEC would like to acknowledge the outstanding support from the health professions schools across the state, both in collecting the data for this report and in working creatively and collaboratively to improve education for the state's health professions students.

Appendix A: The Health Professions Schools Surveyed (29 Total)

Doctors of Medicine (MD) & Osteopathic Medicine (DO)

1) Campbell University
2) Duke University
3) East Carolina University
4) UNC-Chapel Hill
5) Wake Forest University

Nurse Practitioner (NP) / Doctor NP (DNP)

1) Duke University
2) East Carolina University
3) Gardner-Webb University
4) UNC-Charlotte
5) UNC-Chapel Hill
6) UNC-Greensboro
7) UNC-Wilmington
8) Western Carolina University
9) Winston Salem State University

Doctor of Pharmacy (Pharm D)

1) Campbell University
2) High Point University
3) UNC-Chapel Hill
4) Wingate University

Physician Assistant (PA)

1) Campbell University
2) Duke University
3) East Carolina University
4) Elon University
5) Gardner-Webb University
6) High Point University
7) Lenoir-Rhyne University
8) Methodist University
9) UNC-Chapel Hill
10) Wake Forest University
11) Wingate University

Appendix B: Survey Questions

1. What are the current and projected new student enrollments for your program? If your program is new, please start with the first year that clinical rotations begin. 2015-16 _____ (current year)
2016-17 _____
2017-18 _____

2. Think about clinical rotation requirements for a new student starting in 2016-17 (for new programs, first year of rotations). How much time (months, weeks or hours) will be required in each setting in order to complete your program? *(Month= 20 days, week= 5 days, day= 8 hours)*

- Ambulatory/outpatient settings_____ (Private practices, FQHCs, health departments, community pharmacies...)
- Inpatient/hospital settings _____

3. Please estimate your need for precepting sites over the next 5 years? Check all that apply.

- More sites
- Sites able to accommodate larger numbers of students
- More specialty preceptors (list clinical areas needed) _____
- other _____

4. During the last 12 months, how satisfied have you been with the overall quality of preceptors that teach your students? *Preceptors = any health care providers (physicians, nurses, pharmacists, physician assistants) who teach students in their practice settings*

- Extremely satisfied
- Very Satisfied
- Moderately
- Slightly satisfied
- Not at all satisfied

5. Currently, what do you do to prepare preceptors to teach?

- Require specific preceptor training
- Offer training/materials to preceptors (not required)
- None of above
- Other preceptor preparation:

Please elaborate on type and length of any training you offer or require:

6. How many precepting sites have you intentionally stopped using in the last 12 months?

7. What were the most common reasons for dropping a site? Check all that apply.

- Concerns about the quality of teaching
- Safety of students
- Did not meet curriculum requirements (ex: insufficient patient population)
- Logistical issues (lack of adequate student housing, too long of drive for students...)
- Difficult to work with
- Other _____

8. To your knowledge, how many precepting sites decided to stop accepting your students in the last 12 months? What were the reasons they gave for not accepting your students? Check all that apply.

- They committed to take students from other schools
- Teaching students is not valued/encouraged by their site
- Feeling burnt out from teaching
- Incentives not adequate
- Other_____

9. What type of outpatient preceptor sites were most difficult to secure in the last 12 months? Check all that apply.

- Behavioral health/psychiatry
- Family Medicine
- General surgery
- Internal Medicine
- OBGYN
- Pediatrics
- Other _____
- No difficulties securing sites

10. What type of inpatient preceptor sites were most difficult to secure in the last 12 months? Check all that apply.

- Behavioral health/psychiatry
- Family Medicine
- General surgery
- Internal Medicine
- OBGYN
- Pediatrics
- Other _____
- No difficulties securing sites

11. What AHEC student/preceptor services does your program currently utilize? Check all that apply.

- AHEC Digital Library or other Information Technology services
- Assistance in finding/recruiting preceptors
- Gatekeeping for practice sites (i.e. coordinating placement for students at 1 or more sites)
- Preceptor development or recognition activities
- Preceptor payments
- Student housing
- Other _____
- None of above

12. Aside from AHEC, what incentives does your program currently offer preceptors/sites? Check all that apply.

- Appreciation dinners, recognition events, awards
- Continuing Professional Development at reduced fee/no charge
- Direct FTE support (support all/part of annual salary of an FTE in exchange for teaching students)
- Faculty appointments
- Information/ Library/ Technology services
- Payments to preceptors or sites based on number of weeks/months of teaching
- Other _____
- None of above

If "Payments" checked above, then:

13. What is the maximum range of payments your school currently provides to sites/preceptors?

- Less than $250 month
- $250-$499 month
- $500-$999 month
- $1,000 -$1,499 month
- $1,500 – $1,999 month
- $2,000 -$2,499 month
- $2,500 - $2,999 month
- $3,000 or more month

14. To your knowledge in the last 12 months, have students rotating from out-of-state programs prevented your students from securing preceptor sites?

Yes/No *If yes* Please describe

_____

15. To your knowledge in the last 12 months, have students chosen out-of-state rotations due to lack of availability of sites in NC? Yes/No If yes please describe_____

16. Thinking of your program's precepting needs over the next 5 years, what solutions, strategies or resources would be most helpful?

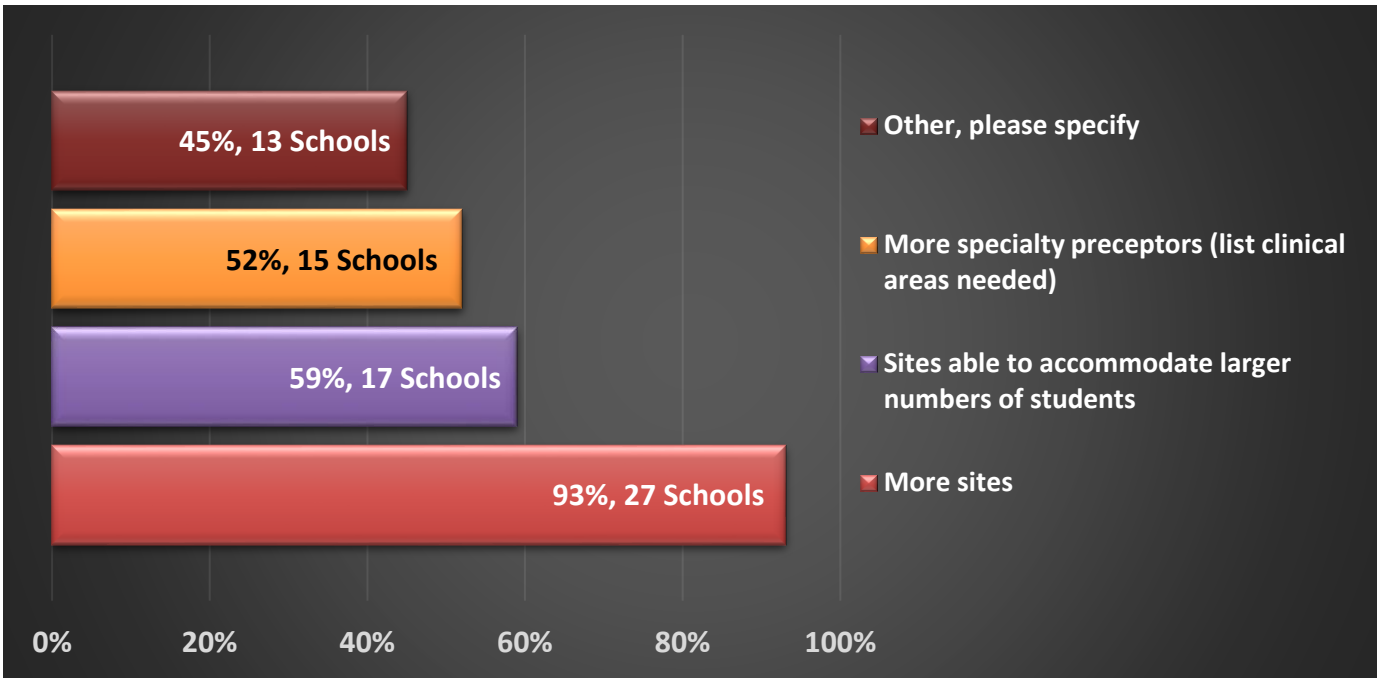
17. To complete the survey, please enter any comments about your precepting needs in the space below and select "Submit" when finished.

Appendix C: Projected Enrollments

6/3/2016		Enrollments - New students per class			
University	**Program**	**2015-16**	**2016-17 projected**	**2017-18 projected**	**Projected % increase**
NP/DNP					
Duke	NP/DNP	125	125	125	
East Carolina	NP/DNP	79	93	97	
Gardner-Webb	NP/DNP	58	58	58	
UNC -CH	NP/DNP	91	98	97	
UNC-Charlotte	NP/DNP	46	52	54	
UNC-Greensboro	NP/DNP	26	26	26	
UNC-Wilmington	NP/DNP	0	8	15	
Western Carolina	NP/DNP	30	31	33	
Winston Salem State University	NP/DNP	16	20	30	
NP/DNP Totals		**471**	**511**	**535**	**14%**
Physician Assistant					
Campbell	PA	44	44	50	
Duke	PA	90	90	90	
East Carolina	PA	34	36	36	
Elon	PA	38	38	38	
Gardner-Webb	PA	22	29	31	
High Point	PA	19	21	35	
Lenoir-Rhyne	PA	0	32	40	
Methodist	PA	40	40	40	
UNC-CH	PA	20	40	40	
Wake Forest	PA	90	90	90	
Wingate	PA	50	50	50	
PA Totals		**447**	**510**	**540**	**21%**
Medicine					
Campbell	SOM	162	162	162	
Duke	SOM	115	115	115	
East Carolina	SOM	80	80	80	
UNC-CH	SOM	180	180	180	
Wake Forest	SOM	120	125	125	
Medicine Totals		**657**	**662**	**662**	**1%**
Pharmacy					
Campbell	SOP	104	104	104	
High Point	SOP	0	70	70	
UNC-CH	SOP	150	145	145	
Wingate	SOP	108	100	100	
Pharmacy Totals		**362**	**419**	**419**	**16%**
Grand totals		**1937**		**2156**	
Projected growth of all 29 programs from FYs 2016-18 = 11% (219 students)					

Appendix D: Graph of needs for precepting sites

How would you estimate your need for precepting sites over the next 5 years?
All programs (N-29. Check all that apply.)



Appendix E: Graph of incentives offered to preceptors/sites

Aside from AHEC, what incentives does your program currently offer preceptors/sites?
All programs (N-29. Check all that apply.)