MEDPATH Program Update  
Health Sciences Education Committee  
June 5, 2009  
Leon McDougle, MD, MPH, Director  
Nikki Radcliffe, MSW, MA, Program Manager

I. OVERVIEW

After more than 30 years of outstanding service at The Ohio State University, Chris Yash, MA, Program Manager of MEDPATH, retired in August 2007. Following a one-month overlap of duties, Kelly Price subsequently took over as Program Manager and Associate Director of MEDPATH. In August 2008, Nikki Radcliffe assumed the role of Program Manager and Associate Director.

The Medical Pathways (MEDPATH) Post-baccalaureate program has enhanced the diversity of the College of Medicine since 1991. Annually, up to 15 underrepresented minority (URM) and disadvantaged students have matriculated to the medical school class of 210. In addition, in 2004 a Continuous Quality Improvement plan was implemented to improve the first-attempt success rate for passing the United States Medical Licensing Examination (USMLE) Step 1 for MEDPATH graduates in medical school. Data collection is ongoing and student performance is improving.

In September 2008 the diversity research manuscript entitled Effectiveness of a Premedical Post Baccalaureate Program in Improving Medical College Admission Test Scores of Underrepresented Minority and Disadvantaged Students, authored by Leon McDougle, David Way, and Christine Yash, was published in the Education Issue of the Journal of the National Medical Association, Vol. 100, No. 9: 1021-1024.

II. PERFORMANCE DATA

Average Postbaccalaureate Program (PBP) MCAT Scores and PBP Grade Point Averages (GPA) for 2002-2003 to 2007-2008 Postbaccalaureate Program Students

<table>
<thead>
<tr>
<th>Postbaccalaureate Program Class</th>
<th>N</th>
<th>Verbal Reasoning</th>
<th>Physical Sciences</th>
<th>Writing</th>
<th>Biological Sciences</th>
<th>MCAT Total</th>
<th>PBP GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2003</td>
<td>12</td>
<td>6.5</td>
<td>5.9</td>
<td>O</td>
<td>7.3</td>
<td>19.7</td>
<td>3.49</td>
</tr>
<tr>
<td>*2003-2004</td>
<td>13</td>
<td>7.3</td>
<td>7.8</td>
<td>P</td>
<td>8.7</td>
<td>23.8</td>
<td>3.74</td>
</tr>
<tr>
<td>*2004-2005</td>
<td>9</td>
<td>8.3</td>
<td>8.6</td>
<td>P</td>
<td>9.7</td>
<td>26.6</td>
<td>3.57</td>
</tr>
<tr>
<td>*2005-2006</td>
<td>15</td>
<td>8.4</td>
<td>9.1</td>
<td>P</td>
<td>9.4</td>
<td>26.9</td>
<td>3.69</td>
</tr>
<tr>
<td>*2006-2007</td>
<td>13</td>
<td>7.2</td>
<td>7.9</td>
<td>N</td>
<td>9.3</td>
<td>24.4</td>
<td>3.69</td>
</tr>
<tr>
<td>*2007-2008</td>
<td>12</td>
<td>7.9</td>
<td>6.8</td>
<td>O</td>
<td>9.2</td>
<td>23.8</td>
<td>3.57</td>
</tr>
<tr>
<td>*2008–2009</td>
<td>12</td>
<td>8.8</td>
<td>6.9</td>
<td>P</td>
<td>8.9</td>
<td>24.7</td>
<td>3.65†</td>
</tr>
</tbody>
</table>

*PBP graduates after the new selection and retention criteria
†Cumulative GPA reflecting Autumn and Winter quarter grades.
First-time USMLE Step 1 Pass Rates for Postbaccalaureate Program (PBP) Students
For PBP Classes Entering in 2002 - 2006

<table>
<thead>
<tr>
<th>Entering Medical School Year</th>
<th>N</th>
<th>Pass First Time (% of Takers)</th>
<th>Not Pass First Time</th>
<th>Did Not Take</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>13</td>
<td>9 (69%)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>12</td>
<td>6 (50%)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>*2004</td>
<td>13</td>
<td>9 (75%)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>*2005</td>
<td>9</td>
<td>7 (88%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>*2006</td>
<td>15</td>
<td>9 (75%)</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

* Postbaccalaureate Program class with new CQI Study Criteria

2E-2004: One student is graduating this spring (2009) one year behind schedule. A second student passed on second attempt and graduated in 2008. A third student has deferred graduation and will be pursuing a second degree (MPH) prior to graduating in 2010.

3E-2004: Successfully transferred to the OSU Masters in Occupational Therapy program and will graduate from that program in June, 2009.

1E-2005: One withdrew for personal reasons after passing Step 1.

2E-2005: One has completed Med 1 and 2 and is currently on Academic LOA after failing USMLE Step 1 on two attempts.

3E-2005: One withdrew to pursue an acting career.

2E-2006: One student took a leave of absence to pursue Step 1 preparation after failing on first two attempts, she passed on the fourth attempt; A second student passed Step 1 on second attempt but has since taken a personal LOA.; A third student passed on their second attempt and started late in Med 3.

3E-2006: One student is repeating Med 2 and is currently a Med 2; A second student is a Med 2 after repeating Med 1 twice; A third student has withdrawn due to academic and personal difficulty.

Plan:

- Beginning June 2009 Lauren Hensely, Coordinator of Learning Services in the Walter E. Dennis Learning Center (Younkin Success Center), will conduct the Learning Strategies sessions during the Summer Pre-Entry Program, MEDPATH’s two-week orientation in September, and once per month during the academic year.
- Consider adding USMLE STEP 1 Prep to an extended MEDPATH curriculum.
III. SERVICE DATA

Survey of Care for the Underserved:

Purpose: Multiple publications describe short-term and intermediate outcomes of premedical postbaccalaureate programs (PBP). However, there were no control group studies reporting the service provided to medically indigent (e.g. on Medicaid, uninsured) and poor patients by graduates of premedical postbaccalaureate programs. Through a survey of practicing physicians, this study explored the relationship between successful completion of this Midwestern PBP and providing care for the underserved.

Method: Graduates of a Midwestern medical school from 1996-2002, who have been in practice for at least 1 year, were surveyed about their current practice population in 2008. Two groups were compared: 1) physicians who completed the PBP and 2) a stratified random control group of physicians who graduated from the same medical school, in the same graduating classes, but did not participate in the PBP.

Results: The survey return rate was 70.9% (73/103). Findings suggest that PBP graduates were more likely to be practicing medicine in a federally designated underserved area (29.4% versus 2.6%, \( p < .009 \)), or providing service where 40% or more of the patients were medically indigent or poor (67.6% versus 30.8%, \( p < .003 \)). PBP graduates were also more likely to be volunteering their services to indigent patients beyond their medical practice (47.1% versus 10.3%, \( p < .001 \)).

Conclusion: This is the first control group study demonstrating the increased likelihood of providing health care to medically indigent (e.g. on Medicaid, uninsured) and poor patients by graduates of a premedical postbaccalaureate program.

Scholarship:


- Podium Presentation: McDougle L, Way DP, Rucker Y. The Ohio State University’s 14th Annual National Conference on Diversity, Race & Learning at the Fawcett Conference Center in Columbus, Ohio, May 6, 2008. Caring for the Underserved: Physician Workforce Diversity Programs & Its Impact on Communities of Color.


Midwestern Premedical Post Baccalaureate Training Program. Academic Medicine accepted for publication April 7, 2009.

Plan:

- Considering completing survey of service for the Track 2 and Track 3 MEDPATH graduates.

IV. Tuition

Tuition for 2009-2010 is $2,886/quarter for in-state students and $7,455/quarter for out-of-state students. Our students are enrolled full-time for autumn, winter, and spring quarters and half-time for summer quarter for a total cost per student of $10,150 for Ohio residents and $26,064 for non-residents.

V. Tuition Support

The anticipated 2009-2010 MEDPATH tuition budget is $273,487.

Plan:

- 15 PBP students have been accepted into the program for the 2009-2010 academic year; 12 students (three in-state, nine out-of-state) received tuition support dollars and three students will be required to pay PBP tuition.

- In order to optimize tuition support dollars, Ohio residents will be selected before similarly qualified out-of-state students for matriculation to MEDPATH.

- Over the course of next year, we will supplement scholarship funds through contact with, and solicitation of donations from, former MEDPATH Program participants. This supplemental scholarship funding would be used to provide direct tuition support for individual students and not rely on payout of dividend
VI. CURRICULUM

The Ohio State University College of Medicine
Postbaccalaureate Program Course of Study

<table>
<thead>
<tr>
<th>2-Week Orientation</th>
<th>Autumn Qtr Hrs</th>
<th>Winter Qtr Hrs</th>
<th>Spring Qtr Hrs</th>
<th>Prematriculation Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science review in biology, chemistry, &amp; physics, plus reading, writing, problem solving, learning strategies and test-taking skills</td>
<td>Allied Med 505 or BC 511 or 613 or English 573.01 or MBC 311 or Microbiology 509 or 520 or Physiology 311 or 601</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Team building</td>
<td></td>
<td></td>
<td></td>
<td>Pre-Entry Program - Gross Anatomy, Neuroanatomy, Genetics, and Immunology</td>
</tr>
<tr>
<td>Adventure Education Workshop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:

Qtr = Quarter
Hrs = Hours

Allied Med 505-506 (Allied Medicine Introduction to Pathology course)
BC = Biochemistry - intermediate
EEOB = Evolution, Ecology, and Organismal Biology
English = (573.01: Rhetoric Theory & Analysis of Discourse)
MBC = Medical Biochemistry - review organic chemistry, basic biochemistry
MCAT Review = Medical College Admissions Test Review Program

Note: Other courses are available.

Levels of courses are chosen based upon the student’s academic background and performance in the orientation science review.

Course Levels

100 - beginning undergraduate students
200 - 2nd - 3rd year undergraduate students
300-400 - 3rd - 4th year undergraduate students
500-700 - 4th year undergraduate and beginning graduate students