NEONATAL-PERINATAL MEDICINE

Neonatal-perinatal medicine is a board-certified subspecialty of pediatrics concerned with the care of critically ill newborn and premature infants. Neonatologists diagnose and treat newborns with conditions such as breathing disorders, infections and birth defects; coordinate care and medically manage newborns born prematurely, critically ill, or in need of surgery; stabilize and treat newborns with any life-threatening medical problems; attend a delivery after which the infant may require medical intervention; and consult with obstetricians, pediatricians, and family physicians about conditions affecting newborn infants.

Neonatologists work mainly in the special care nurseries or newborn intensive care units of hospitals, primarily children’s hospitals, university medical centers, and large community hospitals. In addition, a neonatologist may provide short-term care on an outpatient basis after the infant has been discharged from the unit.
Profile
The following information reflects responses from 28 neonatologists who completed the 2003 Pathway Physician's Survey.

A. Respondents by types of areas
- Small City: 28.57%
- Large City: 25.00%
- Metropolitan City: 46.43%

B. Respondents by gender
- Male: 78.57%
- Female: 21.43%

C. Respondents by years in practice
- 1-5 yrs: 25.00%
- 6-10 yrs: 46.43%
- 11-15 yrs: 28.57%
- 16-25 yrs: 21.43%
- 26-30 yrs: 78.57%
- More than 30 yrs: 21.43%

Perspectives

A. Respondents' satisfaction with current specialty/area of work
- Very satisfied: 25.00%
- Somewhat satisfied: 46.43%
- Neither satisfied nor dissatisfied: 28.57%
- Somewhat dissatisfied: 21.43%
- Very dissatisfied: 78.57%
B. Would you choose this specialty again?

C. Respondents by practice environment

D. Respondents' satisfaction with practice environment
Rating and Weighting of Critical Factors

Critical Factors represent significant aspects of physicians’ experiences in their practices. The rating represents their assessment of their current practice characteristics, while the weighting represents the importance of each factor to physicians.

A. Caring for patients: How much time do you spend directly seeing and caring for patients?

Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>No time at all</td>
<td>Most of my time</td>
</tr>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>7.5</td>
<td>4.8</td>
</tr>
</tbody>
</table>

σ = 2.17

σ = 0.42

B. Continuity of care: How much continuity of care do you have with patients, (i.e., the length of patient relationships)?

Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term</td>
<td>Long Term</td>
</tr>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>5.0</td>
<td>3.8</td>
</tr>
</tbody>
</table>

σ = 2.19

σ = 0.99

C. Autonomy: To what extent do you have the final word on the treatment of your patients?

Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very limited autonomy</td>
<td>Great deal of autonomy</td>
</tr>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>8.7</td>
<td>4.1</td>
</tr>
</tbody>
</table>

σ = 1.52

σ = 0.76
D. Diversity: How much routine (similar work) or diversity (different tasks/activities) is involved in your work?

Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Great deal of routine</th>
<th>Great deal of diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

σ = 1.70

E. Personal time: Does your work allow you to control the scheduling and amount of time you spend on personal activities, (i.e., family, leisure)?

Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Very little flexibility</th>
<th>A great deal of flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

σ = 1.92

F. Expertise: How broad is the scope of your work?

Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Narrow expertise</th>
<th>Broad Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

σ = 2.32
G. Income satisfaction: Compared to all physicians, do you feel you are fairly compensated for the amount of time and effort you spend?

Rating

![Rating Chart]

Weighting

![Weighting Chart]

H. Creativity: To what extent does your work provide opportunity for creativity?

Rating

![Rating Chart]

Weighting

![Weighting Chart]

I. Certainty of outcomes: How much certainty of clinical outcomes does your work provide?

Rating

![Rating Chart]

Weighting

![Weighting Chart]
J. Clinical decision-making: On what basis are your clinical decisions made?

- **Application of theory to a situation**
  - Rating: 7.2
  - Weighting: 3.9

K. Patient decision-making: To what extent do your patients have input into decisions about their health care?

- **Little opportunity**
  - Rating: 4.3
  - Weighting: 3.3

L. Interacting with other physicians/members of health-care team: To what extent does your work provide opportunities for you to interact with other physicians/members of a health-care team?

- **Very little**
  - Rating: 8.4
  - Weighting: 4.2
M. **Manual/mechanical activities:** How often do you use manual/mechanical activities for highly skilled tasks (i.e., following procedures, performing operations)?

**Rating**

![Rating chart for manual/mechanical activities](chart1.png)

\[ \text{Rating} = 6.1 \]

\[ \sigma = 1.68 \]

**Weighting**

![Weighting chart for manual/mechanical activities](chart2.png)

\[ \text{Weighting} = 3.5 \]

\[ \sigma = 0.88 \]

N. **Pressure:** How much pressure do you have in your work (i.e., dealing with clinical crises, need for immediate decisions about patients, dealing with multiple patients simultaneously).

**Rating**

![Rating chart for pressure](chart3.png)

\[ \text{Rating} = 8.0 \]

\[ \sigma = 1.53 \]

**Weighting**

![Weighting chart for pressure](chart4.png)

\[ \text{Weighting} = 3.6 \]

\[ \sigma = 0.92 \]

O. **Responsibility:** How much responsibility do you assume for patient outcomes in your work?

**Rating**

![Rating chart for responsibility](chart5.png)

\[ \text{Rating} = 7.7 \]

\[ \sigma = 1.22 \]

**Weighting**

![Weighting chart for responsibility](chart6.png)

\[ \text{Weighting} = 4.1 \]

\[ \sigma = 0.72 \]
**P. Schedule:** What type of schedule do you have in your work?

**Q. Security:** How much professional security do you have in your position, (i.e., know where you stand and are certain of your future professionally, will there be a need for your services in the future)?

**R. Sense of accomplishment:** To what extent does your work provide the opportunity to see end results?
Weekly distribution of time
According to the survey, neonatologists spend their week as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Average Hours per week (may overlap)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient care activities</td>
<td>32.54</td>
</tr>
<tr>
<td>On-call (in contact)</td>
<td>20.06</td>
</tr>
<tr>
<td>On-call (available)</td>
<td>30.95</td>
</tr>
<tr>
<td>Administrative</td>
<td>8.98</td>
</tr>
<tr>
<td>Professional travel</td>
<td>4.35</td>
</tr>
<tr>
<td>Continuing education</td>
<td>2.74</td>
</tr>
<tr>
<td>Community service</td>
<td>2.33</td>
</tr>
<tr>
<td>Research</td>
<td>8.00</td>
</tr>
<tr>
<td>Other professional</td>
<td>5.29</td>
</tr>
</tbody>
</table>

Patient profile

A. Patient encounters per week

![Bar chart showing patient encounters per week]

B. Patient characteristics

<table>
<thead>
<tr>
<th>By age</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants (0-2 yrs)</td>
<td>99.59</td>
</tr>
<tr>
<td>Children (3-18 yrs)</td>
<td>3.00</td>
</tr>
<tr>
<td>Adults (19-64 yrs)</td>
<td>18.00</td>
</tr>
<tr>
<td>Older adults (65+ yrs)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By race</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underrepresented minority (URM)</td>
<td>39.64</td>
</tr>
<tr>
<td>Non-URM</td>
<td>60.36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By type of insurance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid/Medicare</td>
<td>42.36</td>
</tr>
<tr>
<td>Uninsured</td>
<td>9.16</td>
</tr>
<tr>
<td>Other</td>
<td>48.52</td>
</tr>
</tbody>
</table>

Percentage of patient encounters that deal with:

- Routine check-ups: 8.56%
- Acute illness: 78.44%
- Chronic illness: 17.68%
- Terminal illness: 3.60%

Percentage of time per patient encounter devoted to:

- Acute conditions: 77.31%
- Chronic conditions: 22.62%
- Preventive health: 13.31%

C. Five types of illnesses/conditions most frequently encountered

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory disorders</td>
<td>38</td>
</tr>
<tr>
<td>Sepsis/infections</td>
<td>27</td>
</tr>
<tr>
<td>Prematurity</td>
<td>24</td>
</tr>
<tr>
<td>Congenital defects</td>
<td>20</td>
</tr>
<tr>
<td>Feeding issues</td>
<td>9</td>
</tr>
</tbody>
</table>
Summary of comments for question: List up to three other factors, if any, you would advise students to consider carefully before selecting your specialty?

Physicians who completed the Pathway Physician’s Survey, 2003, submitted the following comments. The majority of comments are categorized by the Critical Factors that are rated and weighted in another section. Numbers in parentheses indicate the total number of responses for a particular comment.

1. Caring for Patients

2. Continuity of Care

3. Autonomy

4. Diversity

5. Personal Time
   • Consider lifestyle they want (2)
   • Life style (2)
   • Time commitment
   • Time for family

6. Expertise
   • Technological sophistication

7. Income Satisfaction
   • Consider financial future

8. Creativity

9. Certainty of Outcomes

10. Clinical Decision Making
    • Evidence base for practice

11. Patient Decision Making

12. Interacting with Other Physicians/Members of Health-care Team
    • Need to appreciate the nursing expertise in caring for their patients

13. Manual /Mechanical Activities
14. Pressure
   - Stress/pressure (7)
   - Intensity of practice at times
   - Commitment to work in a stressful atmosphere

15. Responsibility
   - Need to assume responsibility for critical care/outcomes

16. Schedule
   - Time commitment
   - Night and weekend work (3)
   - Night hours (2)
   - Long hours (2)
   - On-call frequency

17. Security

18. Sense of Accomplishment

19. Patient Characteristics
   - Dealing with babies and their families

20. Types of Illnesses

21. Practice Environment
   - Work environment (colleagues)
   - Liability

22. Health Care Environment

23. Personality/Temperament
   - Willing to make difficult decisions
   - Ability to handle stress
   - Need to be comfortable consoling and educating parents and family regarding their infant
   - Compassion

24. Miscellaneous Comments
   - Genuine interest (2)
   - Social stability
   - To go to specialty that will make them happy (2)
   - Academic expectations
   - Consider the type of work in terms of patients and skill needed and how that matches with what talents they have
• Making a difference (2)
• No office work
• Location
• In-house calls
• Job satisfaction
• Doing something that makes them want to get up in the morning
• Practice commitment
• Rewards, good feeling
• Professional satisfaction (2)
• Respect from patients and peers
• Dealing with failures