Addition of the Registered Dietitian to the National Health Service Corps for Loan Repayment

NFS 810—Food and Nutrition Public Policy
White Paper Presentation
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Objectives

- To review the prevalence of chronic diseases in the United States
- To discuss and highlight Registered Dietitian (R.D.) practitioner ratios and rankings by state and the benefits of the R.D.
- To introduce the National Health Service Corps (N.H.S.C.) Loan Repayment Program
- To provide information on similar loan repayment programs for other disciplines
- To introduce the solution with possible consequences
Prevalence of chronic diseases higher in U.S. and estimated cost

<table>
<thead>
<tr>
<th>Chronic Disease</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular disease (C.V.D.)</td>
<td>81 million Americans suffer from C.V.D. at a cost of 503 billion in 2010</td>
</tr>
<tr>
<td>Diabetes</td>
<td>24 million Americans suffer from diabetes at a cost of 174 billion in 2007</td>
</tr>
<tr>
<td>Overweight/obese</td>
<td>67 million Americans suffer from being overweight/obese at a cost of 147 billion in 2008</td>
</tr>
</tbody>
</table>

(Sorenson, 2011)
### Individual behaviors leading to chronic diseases

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>435,000 deaths (18.1% of total)</td>
</tr>
<tr>
<td>Poor diet and lack of exercise</td>
<td>365,000 deaths (15.2% of total)</td>
</tr>
<tr>
<td>Misuse of alcohol</td>
<td>84,000 deaths (3.5% of total)</td>
</tr>
</tbody>
</table>

Account for approximately 40% of all deaths

(Sorenson, 2011)
Comparison: Percentage of Obese (BMI >30) in U.S. Adults in 1990 and 2010

(Centers for Disease Control, 2010)
## Prevalence of chronic diseases by state

<table>
<thead>
<tr>
<th>Percentage heart disease</th>
<th>Percentage diabetes</th>
<th>Percentage BMI &gt;25 kg/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Virginia (6%)</td>
<td>Alabama (13.2%)</td>
<td>Alabama (70%)</td>
</tr>
<tr>
<td>Kentucky (5.8%)</td>
<td>Mississippi (12.4%)</td>
<td>Mississippi (68.8%)</td>
</tr>
<tr>
<td>Alabama (5.6%)</td>
<td>West Virginia (11.7%)</td>
<td>West Virginia (67.9%)</td>
</tr>
<tr>
<td>Florida (5.5%)</td>
<td>Tennessee (11.3%)</td>
<td>Tennessee (67.5%)</td>
</tr>
<tr>
<td>Oklahoma (5.4%)</td>
<td>South Carolina (10.7%)</td>
<td>Kentucky (67.5%)</td>
</tr>
<tr>
<td>Louisiana (5.3%)</td>
<td>Florida (10.4%)</td>
<td>South Carolina (67.4%)</td>
</tr>
<tr>
<td>Michigan (5.3%)</td>
<td>Oklahoma (10.4%)</td>
<td>Oklahoma (67.3%)</td>
</tr>
<tr>
<td>Arkansas (5.1%)</td>
<td>Louisiana (10.3%)</td>
<td>Arkansas (67.2%)</td>
</tr>
</tbody>
</table>

(Centers for Disease Control, 2010)
What does the R.D. bring to the table?

- Food and nutrition expert in the treatment and prevention of heart disease, diabetes, obesity
- Administer cost effective medical nutrition therapy
- Accredited education to protect the public and students
  - Didactic
  - Supervised practice
- Credentialing examination

## R.D. practitioner ratios and ranking

<table>
<thead>
<tr>
<th>State</th>
<th>RD practitioner ratio per 100,000 population, US</th>
<th>Ranking of RD practitioner ratio by state</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Virginia</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>South Carolina</td>
<td>19.1</td>
<td>49</td>
</tr>
<tr>
<td>Florida</td>
<td>19.7</td>
<td>46</td>
</tr>
<tr>
<td>Arkansas</td>
<td>23.5</td>
<td>41</td>
</tr>
<tr>
<td>Mississippi</td>
<td>23.6</td>
<td>40</td>
</tr>
<tr>
<td>Alabama</td>
<td>24.2</td>
<td>38</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>24.7</td>
<td>36</td>
</tr>
<tr>
<td>Louisiana</td>
<td>26.4</td>
<td>29</td>
</tr>
</tbody>
</table>

(Haughton & Stang, 2012)
Solution . . .

- How do we get R.D.s to those states with high levels of chronic disease to combat the problems of heart disease, diabetes, and obesity?

- Include R.D.s under the National Health Service Corps (N.H.S.C.) Loan Repayment Program (L.R.P.)
What is the N.H.S.C.?

- National Health Service Corps
- Administered by the Department of Health and Human Services (D.H.H.S.)
- Seeks specific health care practitioners to provide health services in under served areas
- As repayment for working in the under served areas, participants receive money for student loan repayment

(D.H.H.S., February 6)
Eligibility to participate

- Be a U.S. citizen
- Provider for Medicare, Medicaid, and Children’s Health Insurance Programs
- Not have other outstanding service obligations to the federal government
- Not be in breach of a health profession service obligation
- Not have any judgment liens arising from federal debt
- Not be excluded, debarred, suspended, or disqualified by a federal agency
- Complete an application

(D.H.H.S., February 6)
Process for application

- Meet all of the eligibility requirements
- Be working or plan to work at an approved N.H.S.C. site (underserved area)
- After verification of working or plan to work at approved N.H.S.C. site, their application to the loan repayment program can be submitted
- Acceptance is based on funding and community need
- Once contract in place, payments in lump sum payment in about 90 days

(D.H.H.S., February 6)
Payment information

- 2-year full time commitment = $40,000-$60,000
- 4-year part time commitment = $40,000-$60,000
- Higher payment given to those working in an underserved area with more need
- Loan repayments are exempt from federal income and employment taxes
- Still receive salary

(D.H.H.S., February 6)
Where are the N.H.S.C. jobs?

- Highest area: Southeast at 3,293
- Next highest area after Southeast: Great Lakes at 2,571
- Lowest area: New England at 1,109

(D.H.H.S., 2012a)
Similar programs

- National Institute of Health (N.I.H.)
  - 2 years commitment
  - $35,000 maximum loan reimbursement

- Texas Education Agency (T.E.A.)
  - Teach in low-income, Title 1 schools within Texas

- Nursing Education Loan Repayment Program
  - 2 year commitment in critical shortage area
  - 60% payment of total balance

- United States Office of Personnel Management (O.P.M.)
  - Federal employees
  - $10,000 loan repayment with maximum of $60,000

Now is the time!

- Spotlight from the White House
  - “Let’s Move” campaign
- 2010 Patient Protection and Affordable Care Act
  - Move from acute care clinical model to a preventative, wellness type model
Potential consequences

• Unintended
  • Saturation of the R.D. market
  • RD shortfall between 2010-2020 of approximately 18,000 full time equivalent
  • Estimate the need of 81,721 R.D.s by 2020 and supply at only 63,741

• Intended
  • Increase access to effective and safe healthcare in health disparate areas
  • Benefit of providing health and nutrition education from individuals of their own race and ethnicity
  • Increase the number of like minority R.D.s in these areas

(Hooker et al, 2012; Agency for Healthcare Research & Quality, 2005)
Conclusion/"Take home message"

• Prevalence of chronic diseases continues to increase
• Nutrition plays a pivotal role in treatment and management with cost effective medical therapy treatment
• Potential in assisting to diminish pockets of low R.D. practitioner ratios in states with higher prevalence of chronic diseases
• The awareness of good nutrition/healthy eating is in the spotlight
• Suitable unintended and intended consequences
• Add the RD to the N.H.S.C. Loan Repayment Program
Thank you!

- Questions?
References: