



**Centre for  
Rural & Northern  
Health Research**

**PILOT PROJECT: TRACKING  
STUDY FOR THE NORTHERN  
ONTARIO DIETETIC INTERNSHIP  
PROGRAM**

**Report Prepared for the  
Northern Ontario School of Medicine  
Lakehead and Laurentian Universities**



**PILOT PROJECT:  
TRACKING STUDY  
FOR THE NORTHERN ONTARIO  
DIETETIC INTERNSHIP PROGRAM**

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April 2011

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## TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	vii
MAIN MESSAGES .....	ix
BACKGROUND .....	1
Core Competencies In Dietetic Internship Programs .....	1
Northern Ontario Dietetic Internship Program (NODIP) .....	2
The Pilot Project.....	3
Methods.....	3
LITERATURE.....	5
Rural Background .....	6
Rural Placements.....	7
Rural Practice.....	9
Rural Dietitians.....	11
EMPLOYMENT EXPERIENCES .....	13
How soon did graduates find work after internship? .....	13
Are graduates currently working in northern or rural communities? .....	14
Do the graduates come from rural and northern backgrounds?.....	15
Where are graduates employed and what are their positions? .....	16
Have graduates found full-time, part-time or casual employment? .....	17
EMPLOYMENT DECISIONS .....	19
Did knowledge of employers or incentives influence decisions? .....	19
What role have practice factors played in employment decisions?.....	20
Do community and personal factors shape employment decisions? .....	22
PREPARATION FOR PRACTICE.....	24
How well did the internship prepare graduates for nutrition practice?.....	24
Did the internship effectively prepare graduates for leadership roles?.....	26
FUTURE CAREER PLANS .....	28
How long do graduates expect to stay in their current positions? .....	28
Why do graduates plan on leaving or staying in their current positions? .....	29
Where would graduates ideally like to practice? .....	31
SUMMARY .....	33
Graduates' Current Employment .....	33
Internship Evaluation.....	34
Career Intentions.....	35
Methodological Considerations .....	36
REFERENCES .....	37
APPENDICES .....	41

## LIST OF TABLES

Table 1 - NODIP Graduates – Rural and Northern Employment (Two Years After Graduation).....	14
Table 2 - NODIP Graduates – Current Practice Settings.....	16
Table 3 - NODIP Graduates – Current Employment (Most Recent Position).....	18
Table 4 - NODIP Graduates – Importance of Practice Factors Influencing Choice of Position (Most Recent Position) .....	21
Table 5 - NODIP Graduates – Community and Personal Factors Affecting Choice of Position (Most Recent Position) .....	23
Table 6 - NODIP Graduates - How Well Prepared for Dietetic Practice (Practice Application and Related Skills) .....	25
Table 7 - NODIP Graduates - How Well Prepared for Leadership Roles (Research and Related Practice Skills).....	27
Table 8 - NODIP Graduates - How Long They Plan to Stay in Current Position.....	28
Table 9 - NODIP Graduates - Reasons for Leaving Position in Less Than 2 Years or Staying Between 2 and 5 Years .....	29
Table 10 - NODIP Graduates - Ideal Community in Which They Would Like to Practice.....	31
Table 11 - NODIP Graduates - Current Community Type by Ideal Community .....	32
Table 12 - NODIP Graduates - Ideal Community Type by Rural Background .....	32

## **ACKNOWLEDGMENTS**

The authors would like to acknowledge and thank the graduates from the first cohort of the Northern Ontario Dietetic Internship Program (2008), who took the time to answer our survey and share information about their experiences in the internship program, their post-graduation employment and career intentions. We also appreciate the assistance provided by colleagues at CRaNHR and NOSM during the development of the questionnaire and implementation of the pilot.

This study was commissioned by the Northern Ontario School of Medicine and supported through the operational funding for the Centre for Rural and Northern Health Research, which is provided by the Ontario Ministry of Health and Long-Term Care. The interpretations and conclusions expressed in this report are the authors' alone; no official endorsement by the Ministry is intended or should be inferred.







## **MAIN MESSAGES**

- The results showed that all NODIP graduates were successful in obtaining employment either during their internship or shortly thereafter. Seven of the ten eventually obtained full-time positions; however, working for more than one employer was common. Eight of the ten held clinical positions, two in public health.
- Significantly, nine of the ten graduates were currently working with organizations that served rural or northern communities. This is impressive in view of the fact that only six of the graduates came from rural backgrounds. Prior knowledge of their employers, especially during their internships, affected employment decisions.
- They were strongly attracted to positions which offered opportunities for continued professional growth, their preferred practice areas, professional supports and interprofessional practice, as well as the possibility of full-time permanent employment. Not surprisingly, their choices were also affected by personal and community factors, specifically proximity to family and friends and community lifestyle.
- NODIP graduates believed that the internship had prepared them very well for entry-level practice. They saw themselves as well-prepared to counsel or coach clients, deliver effective client-centred and inter-professional care, plan clinical and community nutrition initiatives and communicate effectively using evidence-informed practices. All were confident about their ability to provide leadership and function in demanding work environments.
- Most of the graduates do not plan to stay in their current position for long. Those who do expect to leave their employers will do so for professional or personal reasons. Some want more permanent positions, enhanced salaries, better working conditions or opportunities for professional growth. Others anticipate leaving their current position for family reasons, such as when their partners relocate to other communities for employment.



## BACKGROUND

The most common route to certification as a Registered Dietitian (RD) is the completion of a university undergraduate degree in food and nutrition followed by practicum training through a recognized accredited provincial dietetic internship program. While many dietetic internships are arranged positions made available through training within academic teaching hospitals, the Northern Ontario Dietetic Internship Program (NODIP) is a unique and fortunate program in that the programming and accountability is an integrated program within the Northern Ontario School of Medicine, the only medical school in Canada that holds this level of integration and responsibility.

### ***Core Competencies In Dietetic Internship Programs***

Dietetic internship programs in Canada are an adaptation of competency based education (Dietitians of Canada, 1996). *Competencies* are statements of the minimum knowledge, skills, and behaviour practices that are essential for graduates of a dietetic internship program to function as an entry-level dietitian.

There are six (6) areas of core competencies that dietetic interns must achieve for certification (Dietitians of Canada, 1996): professional practice, assessment, planning, implementation, evaluation and communication. These competencies are applicable in any setting or program that an entry-level or experienced dietitian may be employed, such as, hospitals, community health centres, long term care facilities, retail food operations, family health teams, day care/senior programs, school meal programs, etc. The competencies are skill-based and transferable to any setting or program.

Dietitians are expected to commit to continuing education and an ongoing critical evaluation of their professional experience as per the Dietitians of Canada Code of Ethics. As a regulated health professional in Ontario, competent practice and self-directed activities are documented and monitored regularly through the College of Dietitians of Ontario (CDO).

### ***Northern Ontario Dietetic Internship Program (NODIP)***

In Ontario, there were 84 intern positions in the 13 accredited dietetic internship programs along with 32 Masters/internship program positions in 2009-10. As one of the accredited Ontario programs, NODIP is a distributed and community based model providing dietetic practice experiences in urban, rural, remote and under-serviced areas of Northern Ontario. Admission to NODIP includes an emphasis on candidates who have a desire to live, work and service Northern and rural communities. In doing so, the academic and practical curriculum is designed to prepare skilled graduates to practice in a diverse range of settings including clinical practice, public health, administration, primary health care, long term care, and rural health care with adept skills in issues of Francophone and Aboriginal health.

In 2009-10, NODIP's 46 week program (September to July) increased from 10 interns to 12 interns with Sault Ste. Marie, Timmins, Thunder Bay and Sudbury used as principal teaching sites, supported by many organizations and facilitators in rural communities throughout Northern Ontario. Interns are expected to travel outside of their principal sites for a minimum of one rural placement. Successful completion of the requirements of 46 weeks of internship qualifies graduates to be considered eligible for Temporary Class Registration with CDO and eligible to write the national Canadian Dietetic Registration Examination.

## ***The Pilot Project***

This pilot project was undertaken by the Lakehead University site of the Centre for Rural and Northern Health Research (CRaNHR), with support from NODIP management and staff. The principal goal of the study, conducted during 2010-11, was to assess the feasibility of using a survey questionnaire to document the employment experiences of NODIP graduates. A secondary goal was to examine the data produced to assess graduates' opinions on the NODIP program.

Specific objectives were to: (a) document NODIP interns' employment patterns since graduation and their career intentions; (b) understand their opinions on how well NODIP has prepared graduates for dietetic practice in northern and rural communities; and (c) assess how well the research methodology and instruments assess graduates' employment experiences. If successful in achieving these objectives, the pilot study questionnaire may be used as the basis for developing an ongoing tracking study.

## ***Methods***

Following a brief review of the literature on rural allied health professionals recruitment and retention experiences, the research team developed a pilot tracking survey to assess the post-internship experiences of NODIP graduates. Survey items were pretested with three recent graduates from non-NODIP dietetic internship programs. The resulting survey ([Appendix A](#)) focussed on five broad questions:

- i. What are the graduates' employment experiences in the years immediately following their completion of the program?
- ii. In what types of health care settings are they practising and what positions do they hold?
- iii. How have their employment decisions been impacted by practice factors, as well as community and family considerations?

- iv. How well has the NODIP program prepared them for practice?
- v. What are their career plans over the next five years?

With approval from the Lakehead University Research Ethics Board, survey packages were distributed to the 2008 NODIP cohort during April 2010, approximately 20 months after graduation, with a follow-up mailing three weeks later. Participants were given an invitation to take part in the study from NODIP ([Appendix B](#)), a covering letter from CRaNHR ([Appendix C](#)) and a consent form ([Appendix D](#)). The consent form also allowed the CRaNHR research team to contact study participants at a later date to discuss subsequent use of data, in the event that a full tracking study is developed.

Once surveys were returned by all 10 individuals in the cohort, data was transferred from the paper copies into an electronic database, with identifying information removed (proper names, locations, specific job titles, etc.). The resulting dataset was analyzed using SPSSx software. Because the categorical nature of the data and the small sample size ( $N = 10$ ) precluded the use of more complex statistical procedures, results were presented descriptively, using frequency and multiple response distributions.

As recommended in the evaluation literature (Jamieson 2004), responses to Likert-format items on graduates' perceptions of the NODIP program and the factors influencing their practice location decisions also were analysed categorically. Additional information was provided by highlighting modal categories (to indicate the most common responses) and ranges (to demonstrate the convergence or divergence of opinions) for individual items (Mogey 1998). Responses to each set of Likert-format items also were summed to provide an overall indicator of how often particular response categories were selected by respondents (Babbie 2010).

## LITERATURE

The literature search which was conducted for this project was designed to explore the factors that affect allied health professionals' recruitment to rural practice and the issues encouraging or deterring them from remaining in such settings. Six electronic databases (PubMed, CINAHL, Social Sciences, ProQuest Nursing and Allied Health and Google Scholar) were searched using a combination of ten keywords (rural, health, workforce, placement, internship, practice, recruitment, retention, allied health, dietetic). Additional Internet searches focussed on the grey literature, including reports on allied health from Canada, Australia and the United States, which were examined for insights into rural recruitment and retention policies and program development.

Publications were included in the review if they reported on research that had been conducted on allied health practitioners in rural, remote or northern communities or included urban-rural comparisons. Articles then were hand-searched for information pertaining to dietitians. With an emphasis on material published since 2000, a total of 38 articles were identified pertaining to recruitment and retention of rural allied health professionals, with eight publications addressing issues regarding dietitians.

Although there was considerable diversity in the content of articles, depending on the definitions of allied health and rurality employed, three themes emerged from the literature review as central factors affecting the recruitment and retention of allied health professionals in rural communities: rural backgrounds, rural placements, and rural practice. These themes, outlined below, formed a framework for the development of the questionnaire and the analysis of results.

## **Rural Background**

Across the health professions, rural background is the strongest predictor of choosing rural practice locations.<sup>1</sup> Research from Australia, for example, confirmed that having a “rural background almost tripled the odds of choosing rural employment.”<sup>2</sup> Students in the allied health professions who come from rural areas also choose rural practice locations more often than nursing or medical students who have rural backgrounds.<sup>3 4 5</sup>

Allied professionals practising in the United States who had lived in a rural town (defined as less than 50,000 population) during their childhood, for example, were more likely to select rural practice locations.<sup>6</sup> More than one-half of health care professionals practising in northern British Columbia also were from rural towns or isolated settlements (defined as having populations less than 100,000).<sup>7</sup>

Other research demonstrated that health professionals from rural backgrounds often choose to practice in communities that are similar to the areas in which they were raised. Rural students in Australia, for example, most often chose

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<sup>1</sup> Fisher, K. & Fraser, J. (2010). Rural health career pathways: research themes in recruitment and retention. *Australian Health Review*, 34(3): 292 - 296.

<sup>2</sup> Playford, D., Larson, A., & Wheatland, B. (2006). Going country: rural student placement factors associated with future rural employment in nursing and allied health. *Australian Journal of Rural Health*, 14(1): 14 - 19. (p. 17).

<sup>3</sup> Keane, S., Smith, T., Lincoln, M. Wagner, S., & Lowe, S. (2008). The rural allied health workforce study (RAHWS): background, rationale and questionnaire development. *Rural and Remote Health*, 8(4): 1132. (Online).

<sup>4</sup> Schofield, D., Fuller, J., Fletcher, S., Birden, H., Page, S., Kostal, K., Wagner, S., & Schultz, L. (2007). Decision criteria in health professionals choosing a rural practice setting: development of the Careers in Rural Health Tracking Survey (CRHTS). *Rural and Remote Health*, 7(3): 666. (Online).

<sup>5</sup> Schofield, D., Fletcher, S., Fuller, J., Birden, H. & Page, S. (2009). Where do students in the health professions want to work? *Human Resources for Health*, 7(1): 74. (Online).

<sup>6</sup> Daniels, A., VanLeit, B., Skipper, B., Sanders, M., & Rhyne, R. (2007). Factors in recruiting and retaining health professionals for rural practice. *Journal of Rural Health*, 23(1): 62-71.

<sup>7</sup> Manahan, C., Hardy, C., & MacLeod, M. (2009). Personal characteristics and experiences of long-term allied health professionals in rural and northern British Columbia. *Rural and Remote Health*, 9(4): 1238. (Online)



rural practice locations that had equivalent populations and lifestyles to the communities in which they grew up.<sup>8</sup> Manahan et al. also found that Canadian health care professionals who were raised in rural areas were acutely aware of the need for services in their home towns; often, they had made decisions about going into rural practice long before they began their professional education.<sup>9</sup>

Not all students with rural backgrounds, however, are equally interested in rural practice. A study of allied health students from Kentucky, for example, showed that one-half came from rural areas, but only one-third expected to accept rural employment.<sup>10</sup> Rural students who chose to begin their professional practice in an urban area, however, often consider rural practice as a viable option for later in their careers.<sup>11</sup>

### **Rural Placements**

Rural placements are believed to enhance interest in rural practice and increase the numbers of students who choose a first practice location in rural areas, although longer-term effects are uncertain.<sup>12</sup> An Australian study, for example, found that two-thirds of the health students who had completed a rural placement

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<sup>8</sup> Playford, D., Larson, A., & Wheatland, B. (2006). Going country: rural student placement factors associated with future rural employment in nursing and allied health. *Australian Journal of Rural Health*, 14(1): 14 - 19.

<sup>9</sup> Manahan, C., Hardy, C., & MacLeod, M. (2009). Personal characteristics and experiences of long-term allied health professionals in rural and northern British Columbia. *Rural and Remote Health*, 9(4): 1238. (Online).

<sup>10</sup> Stewart, S., Pool, J. & Winn, J. (2002). Factors in recruitment and employment of allied health students: preliminary findings. *Journal of Allied Health*, 31(2): 111 - 115.

<sup>11</sup> Schoo, A., McNamara, K., & Stagnitti, K. (2008). Clinical placement and rurality of career commencement: a pilot study. *Rural and Remote Health*, 8(3): 964. (Online).

<sup>12</sup> Ranmuthugala, G., Humphreys, J. Solarsh, B., Walters, L., Worley, P. Wakerman, J., Dunbar, J. & Solarsh, G. (2007). Where is the evidence that rural exposure increases uptake of medical practice? *Australian Journal of Rural Health*, 15(5): 285 - 288.

had decided to work in rural areas.<sup>13</sup> Similar results were shown in American surveys of allied health, nursing and medical students; those exposed to placements in rural areas<sup>14</sup> and Native American communities<sup>15 16</sup> were more likely to choose first practices in rural or underserved areas. An evaluation of British Columbia's Interprofessional Rural Program (IRPBC), which placed health students in interprofessional settings in northern towns, revealed that students who had completed such placements were predisposed to choosing rural practice locations.<sup>17</sup>

While effects of rural training are strongest for students from rural backgrounds, such placements can encourage urban students to explore rural options.<sup>18</sup> Longer placements and internships were believed to be especially beneficial in this regard because they gave urban students a more realistic view of practice in smaller and more isolated areas.<sup>19 20</sup> For trainees who are already interested in rural practice, moreover, an extended placement in a rural community can confirm or disconfirm their intentions about pursuing rural practice options.<sup>21 22</sup>

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- <sup>13</sup> Schoo, A., McNamara, K., & Stagnitti, K. (2008). Clinical placement and rurality of career commencement: a pilot study. *Rural and Remote Health*, 8(3): 964. (Online).
- <sup>14</sup> Rhyne, R., Daniels, Z., Skipper, B., Sanders, M., & VanLeit, B. (2006). Interdisciplinary health education and career choice in rural and underserved areas. *Medical Education*, 40(6): 504 - 513.
- <sup>15</sup> Mu, K., Chao, C., Jensen, G., & Royeen, C. (2003). Effects of interprofessional rural training on students' perceptions of interprofessional health care services. *Journal of Allied Health*, 33(2): 125 - 131.
- <sup>16</sup> Amundson, M., Moulton, P., Zimmerman, S., & Johnson, B. (2008). An innovative approach to student internships on American Indian Reservations. *Journal of Interprofessional Care*, 22(1): 93 - 101.
- <sup>17</sup> Charles, G., Bainbridge, L., Copeman-Stewart, K., Kassam, R., & Tiffin, S. (2008). Impact of an interprofessional rural health care practice education experience on students and communities. *Journal of Allied Health*, 37(3): 127 - 131.
- <sup>18</sup> Smith, T., Brown, L. & Cooper, R. (2009). A multidisciplinary model of rural allied health clinical - academic practice. *Journal of Allied Health*, 8(4): 236 - 241.
- <sup>19</sup> Schoo, A., McNamara, K., & Stagnitti, K. (2008). Clinical placement and rurality of career commencement: a pilot study. *Rural and Remote Health*, 8(3): 964. (Online).
- <sup>20</sup> McAllister, L., McEwen, E., Williams, V. & Frost, N. (1998). Rural attachments for students in the health professions: are they worthwhile? *Australian Journal of Rural Health*, 6(4): 194 - 201.
- <sup>21</sup> Guion, W., Midhoe, S., Taft, A., & Campbell, C. (2006). Connecting allied health students to rural communities. *Journal of Rural Health*, 22(3): 260 - 262.

## **Rural Practice**

Although rural training programs and financial incentives encourage health care workers to enter rural practice, comparatively little is known about the factors affecting retention in the longer-term.<sup>23</sup> What is known is that health professionals, who choose to remain in rural practice or leave, do so for a complex set of reasons related both to their work and personal life.<sup>24 25</sup>

From a professional perspective, the more generalized scope of practice found in rural communities can encourage or deter health care professionals from staying.<sup>26</sup> Allied health care professionals who remained in rural New York State, for example, liked the wider scope of practice, the independence, and the respect they received from clients and physicians; those who left, however, wanted opportunities to develop a more specialized set of skills.<sup>27</sup>

Other research demonstrated that specific management supports are needed to keep allied health care providers in rural practices. Australian dietitians and nutritionists in rural and isolated communities more often intended to stay in their current location if they had adequate orientation, clear job descriptions and on-site

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<sup>22</sup> Playford, D., Larson, A., & Wheatland, B. (2006). Going country: rural student placement factors associated with future rural employment in nursing and allied health. *Australian Journal of Rural Health*, 14(1): 14 - 19.

<sup>23</sup> Bärnighausen, T., & Bloom, D. (2009). Financial incentives for return of service in underserved areas: a systematic review. *BMC Health Services Research*, 9: 86. (Online).

<sup>24</sup> Stuber, J. (2004). Recruiting and retaining allied health professionals in rural Australia: why is it so difficult? *Internet Journal of Allied Health Sciences and Practice*, 2(2). (Online).

<sup>25</sup> Schoo, A., Stagnitti, K., Mercer, C., & Dunbar, J. (2005). A conceptual model for recruitment and retention: allied health workforce enhancement in Western Victoria, Australia. *Rural and Remote Health*, 5(4): 477. (Online).

<sup>26</sup> Gilham, S. & Ristevski, E. (2007). Where do I go from here: we've got enough seniors? *Australian Journal of Rural Health*, 15(5): 313 - 320.

<sup>27</sup> Lindsay, S. (2007). Gender differences in rural and urban practice location among mid-level health care providers. *Journal of Rural Health*, 23(1): 72 - 76.

supervision by managers who had training in dietetics.<sup>28</sup> Rural allied health professionals, on the other hand, can become discouraged by excessive workloads, travel burdens, limited career paths, an absence of professional support and unsatisfactory management.<sup>29</sup> <sup>30</sup> Lack of support was most problematic for new graduates, who needed mentoring and other assistance to make the transition from internship to rural practice. <sup>31</sup>

The perceived “fit” between rural communities and individual lifestyles also affected decisions to stay or leave. Young professionals, initially attracted to rural areas because of employment prospects, quickly became disenchanted with rural life if they had few opportunities to socialize with their peers.<sup>32</sup> <sup>33</sup> Health professionals who were not married had more difficulties fitting into close-knit rural communities and subsequently often only stay a year or two.<sup>34</sup> Those who remain in rural practice, however, settled into rural communities, with family or friends nearby, and appreciated the slower pace of life.<sup>35</sup> <sup>36</sup>

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<sup>28</sup> Stagnitti, K., Schoo, A., Dunbar, J. & Reid, C. (2006). An exploration of issues of management and intention to stay: allied health professionals in South West Victoria, Australia. *Journal of Allied Health*, 35(4): 226 - 232.

<sup>29</sup> Stagnitti, K., Schoo, A., Reid, C., & Dunbar, J. (2005). Retention of allied health professionals in the south-west of Victoria. *Australian Journal of Rural Health*, 13(6): 364 - 365.

<sup>30</sup> Hernan, A., Schoo, A., & O’Toole, K. (2009). Leaving the bush: why did they do it? Paper presented at the 10<sup>th</sup> National Rural Health Conference. Cairns, Queensland, AU; May 17 - 20.

<sup>31</sup> Lee, S., & Mackenzie, L. (2003). Starting out in rural new South Wales: the experiences of new graduate occupational therapists. *Australian Journal of Rural Health*, 11(1): 36 - 43.

<sup>32</sup> Gillham, S. & Ristevski, E. (2007). Where do I go from here: we’ve got enough seniors? *Australian Journal of Rural Health*, 15(5): 313 - 320.

<sup>33</sup> Hernan, A., Schoo, A., & O’Toole, K. (2009). Leaving the bush: why did they do it? Paper presented at the 10<sup>th</sup> National Rural Health Conference. Cairns, Queensland, AU; May 17 - 20.

<sup>34</sup> Lee, S., & Mackenzie, L. (2003). Starting out in rural new South Wales: the experiences of new graduate occupational therapists. *Australian Journal of Rural Health*, 11(1): 36 - 43.

<sup>35</sup> Manahan, C., Hardy, C., & MacLeod, M. (2009). Personal characteristics and experiences of long-term allied health professionals in rural and northern British Columbia. *Rural and Remote Health*, 9(4): 1238. (Online)

<sup>36</sup> Stagnitti, K., Schoo, A., Reid, C., & Dunbar, J. (2005). Retention of allied health professionals in the south-west of Victoria. *Australian Journal of Rural Health*, 13(6): 364 - 365.

Over the long term, family issues exerted a strong influence on retention of rural health professionals. Allied health professionals who had children, for example, often decided to stay or leave rural practices based on the suitability of the communities as a place to raise their children.<sup>37 38</sup> They also considered availability of employment for a spouse or partner and childcare in making decisions about rural practice.<sup>39</sup> Female professionals were especially constrained in choosing rural locations: most work in the same community as their spouse or partner or commute just a short distance away; those who have caregiving responsibilities for elderly family members also locate nearby.<sup>40</sup>

### ***Rural Dietitians***

The literature suggests that rural dietitians are in some respects similar to other allied health professionals; in other respects, they differ. Dietitians practising in rural Australia, for example, were younger than other allied health professionals and more often were recent graduates, with just under five years of experience.<sup>41</sup> Like other health care professionals, however, dietitians chose rural practice based on a complex set of factors: availability of employment, lifestyle, comfort with communities, proximity to family and friends, opportunities for professional

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<sup>37</sup> Schofield, D., Fletcher, S., Fuller, J., Birden, H. & Page, S. (2009). Where do students in the health professions want to work? *Human Resources for Health*, 7(1): 74. (Online).

<sup>38</sup> Schoo, A., Stagnitti, K., Mercer, C., & Dunbar, J. (2005). A conceptual model for recruitment and retention: allied health workforce enhancement in Western Victoria, Australia. *Rural and Remote Health*, 5(4): 477. (Online).

<sup>39</sup> Battye, K. & McTaggart, K. (2003). Development of a model for sustainable delivery of outreach allied health services to remote north-west Queensland, Australia. *Rural and Remote Health*, 3(3): 194. (Online).

<sup>40</sup> Lindsay, S. (2007). Gender differences in rural and urban practice location among mid-level health care providers. *Journal of Rural Health*, 23(1): 72 - 76.

<sup>41</sup> Smith, T., Cooper, R., Brown, L., Hemmings, R. & Greaves, J. Profile of the rural allied health workforce in Northern New South Wales and comparison with previous studies. *Australian Journal of Rural Health*, 16(3): 156 - 163.

development, career advancement and specialized practice, as well as awareness of the need for dietitians in rural communities, affected their decisions.<sup>42</sup>

Rural dietitians, however, may have somewhat different retention issues, due to the fact that they often are employed as sole practitioners.<sup>43</sup> Often, they became dissatisfied about high workloads, the travel required for outreach care, the lack of professional supports and limited peer interactions.<sup>44</sup> <sup>45</sup> They also faced challenges in developing the additional skills and specialized knowledge to serve increasing numbers of clients with complex comorbidities, such as diabetes and renal failure.<sup>46</sup> Given these difficulties, several interventions have been used to foster retention. These include one-on-one mentoring for new graduates to ease their transition into rural practice,<sup>47</sup> peer networking for dietitians and nutritionists practising in rural and isolated locations,<sup>48</sup> and specialized instruction in diabetes care,<sup>49</sup> all delivered *via* teleconferencing or videoconferencing.

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<sup>42</sup> Heaney, S., Tolhurst, J., and Baines, S., (2004). Choosing to practice in rural dietetics: What factors influence that decision? *Australian Journal of Rural Health*, 12: 192-196.

<sup>43</sup> Brown, L., Capra, S., & Williams, L. (2006). Profile of the Australian dietetic workforce: 1991 – 2005. *Nutrition and Dietetics*, 63(3): 166 – 178.

<sup>44</sup> Brown, L., Williams, L. & Capra, S. (2008). Recruitment and retention issues for the rural dietetic workforce. Presentation to the 26<sup>th</sup> National Conference of the Dietitians Association of Australia. Gold Coast, Queensland, AU; May 29 - 31.

<sup>45</sup> Devine, C., Jastran, M. & Bisogni, C. (2004). On the front line: practice satisfactions and challenges experienced by dietetics and nutrition professionals working in community settings in New York State. *Journal of the American Dietetics Association*, (5): 87 - 92.

<sup>46</sup> Brown, L., Williams, L. & Capra, S. (2009). Dietetic workload and casemix in rural acute care settings. Presentation to the NWS Rural Allied Health Conference. Tamworth, New South Wales, AU; November 12 – 13.

<sup>47</sup> Palermo, C., Hughes, R., & McCall, L. (2010). A qualitative evaluation of an Australian public health nutrition workforce development intervention involving mentoring circles. *Public Health Nutrition*, 21: 1 - 8.

<sup>48</sup> Shirtcliff, J., O'Neill, E., Byrne, C., Carey, B., Courtice, S., Giles, C., Kirkwood, J., & MacRae, A. (2006). Bush Nuts: maintaining our workforce to achieve a common outcomes. Presentation to the 2006 National Services for Australian Rural and Remote Allied Health (SARRAH) Conference. Albury, NWS, AU; September 13 – 16.

<sup>49</sup> Butcher, M., Gilman, J., Meszaros, J., Bjorsness, D., Madison, M., McDowall, J., Oser, C., Johnson, E., Harwell, T., Helgerson, S., & Gohdes, D. (2006). Improving access to quality diabetes education in a rural state. *Diabetes Educator*, 32(6): 963 – 967.

## EMPLOYMENT EXPERIENCES

To understand the NODIP cohort's employment experiences in the approximately two years which have passed since their graduation, respondents were asked to list, in chronological order, each of the positions they had occupied since graduation, providing details on start and end dates, duration in months, location of employment and reason for leaving positions. Furthermore, they were asked whether or not they relocated to gain positions. Additional details were gathered on their most recent position, roles and responsibilities.

### ***How soon did graduates find work after internship?***

All of the NODIP graduates were successful in obtaining employment during or shortly after their internship experience: 5 secured employment in the field of dietetics during the internship, 4 found positions within two months of graduation and one individual found employment between three and six months. The length of initial contracts, employment locations, and reasons for leaving, however, varied:

- Four individuals were still with their first employer at the time of the survey, approximately 24 months past graduation; the others had completed initial contracts, lasting from 1- 22 months, and gone onto other positions.
- Altogether, five participants had second positions; three had worked with three different employers; two had worked for four organizations; and one individual had six different employers. Contract lengths of 1, 4, 6, 8, 9, 11 and 12 months were reported.
- "End of contract" was the most-often cited reason for leaving a particular position (n = 5); "availability of full-time permanent position," "position in a preferred practice area" or "spousal relocation" were additional reasons offered.

## ***Are graduates currently working in northern or rural communities?***

As evidence of success in preparing graduates for northern and rural practice, nine of the 10 of NODIP's 2008 cohort were currently working with organizations that served such areas ([Table 1](#)). Seven dietitians found employment in Northern Ontario and remained in the region; another graduate, initially employed in the north, later relocated to an urban area in Southern Ontario. Two graduates relocated to rural regions elsewhere in Canada immediately after completing their internship; both have continued to work with clients living in small towns and rural communities.

**Table 1 - NODIP Graduates – Rural and Northern Employment (Two Years After Graduation)**

<b>Current Community</b>		<b># Respondents</b>	<b>Relocations</b>
Northern Ontario	Rural	1	Ongoing position in small rural community
	Regional centre	4	Employment in three regional centres; two relocations from one centre to another
	Large urban area	3	Sequence of positions within same communities
Southern Ontario	Large urban area	1	Relocation from large urban area in Northern Ontario
Other Canada	Rural	1	Ongoing positions serving small towns and rural areas
	Regional centre	1	Relocation from small town to regional centre, employers in urban, small town and rural areas
Key: Community type (Rural – less than 4,999 population; small town – 5,000 – 9,999 population; large town – 10,000 – 24,999 population; regional centre – 25,000 – 99,999 population; large urban area – over 100,000 population)			



### ***Do the graduates come from rural and northern backgrounds?***

As revealed in the literature review, studies show that people born and raised in rural communities are more likely to practice in rural and remote areas. Consequently, the survey questionnaire sought information on the size and type of communities or provinces where respondents were raised and completed high school. Similar questions assessed the location of their nutrition training and any other undergraduate degrees. Based on the information provided, four of the ten NODIP graduates spent their childhood and high school years exclusively in larger metropolitan areas; the rest had spent at least some of their childhood and adolescence in smaller centres:

- Four were raised in large urban areas (over 100,000 population), two in regional centres (25,000-99,999 population) and one in a large town (10,000 and 24,999 population).
- The remaining three individuals had relocated during their childhood and high school years from smaller communities to large urban areas, or from larger centres to small towns; two of the three had lived in rural communities (less than 4,999 residents).
- Seven graduates spent their childhood years in Ontario, two in the Maritimes and one in Western Canada; eight completed their high school education in Ontario and two attended high school in Atlantic Canada.
- Based on a definition of rural background as having lived in a community of less than 100,000 during childhood or high school, six NODIP graduates had a rural background.
- Eight of the ten NODIP graduates had received their nutrition education in Ontario (Guelph, Western); the remaining two graduated from universities in Atlantic Canada (Memorial, Prince Edward Island). Two had completed bachelor's degrees in other disciplines prior to completing their nutrition degree. With the exception of one person who was in the process of completing a food security certificate program, none had taken any specialty training in nutrition since completion of the internship program.

### ***Where are graduates employed and what are their positions?***

Presented with a list of health care employers and occupational roles typically filled by dietitians, respondents were asked to identify categories which best describe their most recent employers and principal positions. As shown in [Table 2](#), NODIP graduates have found employment in more than 25 health care organizations, with clinical positions predominating:

- Most frequently, graduates were affiliated with rural hospitals (n = 5), diabetic care programs (n = 5), outpatient medical clinics (n = 4) and long-term care organizations (n = 5).
- Comparatively few dietitians were working in urban hospitals, family health teams, public health units or home care agencies (n = 2 in each category).
- Eight graduates identified their principal position as being a clinical dietitian and two worked in public health. One of the cohort had additional responsibilities as a sole charge dietitian. (not shown)

**Table 2 - NODIP Graduates – Current Practice Settings  
(Multiple Responses)**

<b>Practice Settings</b>	<b># Responses</b>
Diabetic Care Program	5
Family Health Team	2
Home Care	1
Long-Term Care	4
Outpatient Medical Clinic	4
Public Health	2
Rural Hospital	5
Urban Hospital	2
Total Number of Practice Settings	25

### ***Have graduates found full-time, part-time or casual employment?***

To determine the conditions under which NODIP graduates are currently employed, the survey documented whether their most recent positions were full-time, part-time, relief, casual or occasional; the number of employers; and, for part-time, or relief positions, whether by choice or not. More than one-half of the 2008 cohort currently had full-time positions; however, working for more than one employer and in multiple practice settings was a frequent occurrence. Collectively, the 10 graduates currently held 17 different positions ([Table 3](#)):

- Seven individuals held full-time positions (five had permanent positions with one employer each; one individual held permanent positions with more than one employer; another reported a non-permanent contract with one employer).
- Four graduates reported that they worked in part-time positions (two by choice; two not by choice). One respondent indicated that she had a part-time position in addition to her full-time employment. Two of the NODIP graduates currently held relief, casual, or occasional positions (one by choice and one not by choice).
- While three graduates worked exclusively for one employer, working for more than one employer was the rule among those who held part-time, relief, casual or occasional positions: five dietitians worked in two different settings, another was employed by three organizations, and one dietitian had five different employers.
- Those who were currently holding part-time, casual or relief positions “not by choice” indicated in written comments that they would prefer a full-time permanent position. Those on short-term contracts also indicated that they would prefer a full-time continuing position. As a graduate commented: “the moment something more permanent comes up, I will take it!”

**Table 3 - NODIP Graduates – Current Employment (Most Recent Position)  
(Multiple Responses)**

<b>FT/PT</b>	<b>Position</b>	<b># of Employers</b>	<b># of Respondents</b>
Full-time	Permanent (ongoing position)	1 employer	5
		More than 1 employer	1
	Non-permanent (contract)	1 employer	1
		More than 1 employer	0
Part-time	By choice	1 employer	2
		More than 1 employer	0
	Not by choice	1 employer	0
		More than 1 employer	2
Relief/ Casual/ Occasional	By choice	n/a	1
	Not by choice	n/a	1

## EMPLOYMENT DECISIONS

To help in understanding NODIP graduates' employment decision-making, the survey contained a number of items asking them to reflect on their employment decision making. With respect to their most recent position, these items assessed their prior knowledge of employers and offers of recruitment and retention incentives. Other questions asked them to evaluate the role of specific practice factors, as well as community and personal factors, influencing their most recent employment choices.

### ***Did knowledge of employers or incentives influence decisions?***

As an indicator of influences on their most recent employment decisions, respondents were asked to indicate whether they had prior knowledge of their current employers and also to identify any recruitment or retention incentives that applied to their situation. It turned out that prior knowledge of employers, especially during NODIP internship placements, but not offers of incentives, influenced their employment choices. Among the five graduates who had knowledge of their employer prior to accepting their most recent position:

- Four of the five learned about their employer while completing their dietetic internship placements. A small number had either worked or volunteered with the employer or knew people who worked with the organization (n = 2 for each factor). Another had previously lived in the town in which the organization was located.
- Only one participant reported receiving offers of recruitment and retention incentives; these incentives included reimbursement of moving expenses at the time of employment and reimbursement of fees and travel for educational workshops or conferences after employment.

### ***What role have practice factors played in employment decisions?***

Practice factors are known to play a major role in job acceptance and practice location choice. To understand these factors, 19 practice statements were evaluated using a five-point Likert-response format, with higher values indicating greater importance (1 = “not important”, 2 = “somewhat important”, 3 = “important”, 4 = “very important”, and 5 = “extremely important”). Respondents were given the option of indicating any inapplicable factors. A supplementary item asked them to rank the “top three” factors which affected their decisions.

A wide range of practice factors, reflecting workplace supports and environments, were deemed to be important by NODIP graduates ([Table 4](#)). Combining the numbers of respondents identifying factors as “very important” or “extremely important” as an overall indication of the most highly ranked factors, a comparatively small group of practice factors had a strong influence:

- Graduates were strongly attracted to positions which offered opportunities for professional growth; specifically, they valued the prospects for acquiring broad experience and continuing professional education (n = 7 for each factor).
- Additional factors rated as being “very” or “extremely” important by at least one-half of the graduates included practice area preferred and opportunities for professional support and quality of work environment (n = 6 for each item), along with opportunities for interprofessional practice and previous experience in practice area (n = 5 for each).
- When graduates selected the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> “most important” factors, there was a wide diversity of opinions. Among the sixteen areas identified in the 1<sup>st</sup> group, only two factors, preferred practice area (n = 4) and full-time permanent employment (n = 3), stood out. Other factors, such as opportunities for professional education (n = 4), typically were ranked as the 2<sup>nd</sup> or 3<sup>rd</sup> most important influences on employment choices.

**Table 4 - NODIP Graduates – Importance of Practice Factors Influencing Choice of Position (Most Recent Position)**

	Factors Practice Factors Influencing Choices	Importance of Factors							Ranked 1 <sup>st</sup> , 2 <sup>nd</sup> or 3 <sup>rd</sup> Most Important		
		1	2	3	4	5	N/A	Range	1st	2nd	3rd
A	Practice area preferred	1	1	1	2	<u>4</u>		1-5	<u>4</u>		
B	Full-time permanent position	2		1	1	<u>3</u>	<u>3</u>	1-5	3	1	
C	Full-time position (non-permanent)	1		1		2	<u>5</u>	1-5	1		
D	Part-time permanent position	2	1		2		<u>4</u>	1-4			
E	Part-time position (non-permanent)	3			2		<u>4</u>	1-4		<u>2</u>	
F	Flexible employment (hours of work, conditions)	1	1	<u>3</u>	2	2		1-5		1	1
G	Opportunity for continuing professional education			2	<u>4</u>	3		3-5		<u>2</u>	<u>2</u>
H	Opportunity for professional support		1	2	<u>3</u>	<u>3</u>		2-5	1		1
I	Opportunity for career advancement or promotion	1	2	2	1	<u>3</u>		1-5			1
J	Opportunity for broad experience	1	1	1	<u>5</u>	2		1-5	1		2
K	Opportunity to specialize	1	2	<u>3</u>	1	1	1	1-5		1	
L	Opportunity to work with cultural or ethnic groups	2	<u>3</u>	<u>3</u>			1	1-3			
M	Aware of need for dietitians in area	1	2	<u>4</u>	2	1		1-5			
N	Incentives or allowances	1	<u>3</u>	<u>3</u>			2	1-3			
O	Salary	1	1	<u>5</u>	1	1		1-5			1
P	Previous contact or knowledge of agency staff	2	<u>3</u>	2	2	1		1-5			1
Q	Quality of work environment	1	1	2	<u>3</u>	<u>3</u>		1-5		1	1
R	Previous experience in practice area		2	3	<u>4</u>	1		2-5		2	
S	Opportunities for interprofessional practice	1	2	1	<u>4</u>	1		1-5			
	Total # Responses	22	26	39	39	31	20				

Key: 1 = "not important", 2 = "somewhat important", 3 = "important", 4 = "very important", 5 = "extremely important" and n/a = "not applicable". (Modal categories are underlined.)

### ***Do community and personal factors shape employment decisions?***

The results also confirmed that community and personal factors shaped NODIP graduates' decisions about accepting employment. Graduates were asked to rank the importance of thirteen community and personal factors on their most recent employment decision, using a five- point Likert-type scale (1 = "not important", 2 = "somewhat important", 3 = "important", 4 = "very important" to 5 = "extremely important"). As summarized in [Table 5](#), results demonstrated that their decisions were strongly influenced by both personal and community considerations, with great diversity in the factors which shaped each individual's decisions:

- Two personal and two community factors were considered "very important" or "extremely important" by one in every two graduates: proximity to friends; proximity to family; lifestyle of the community; and quality of the physical environment in the area were deemed to be important (n = 5 in each category).
- Among personal factors, proximity to friends was highly relevant: all five individuals who selected this item placed it in the "extremely important" category.
- Additional community characteristics identified as having a high degree of importance for employment decisions included having a spouse or partner employed in the area, educational opportunities for self, cultural and recreational opportunities and feeling comfortable in that type of town (n = 4 for each factor).
- Grouping the factors that were ranked "1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup>" together, family ties played a pivotal role in employment decision-making, with proximity to family (n = 5), home towns (n = 4) and having a spouse or partner employed in the area (n = 3) being most often in the "top three." As one of the participants said: "All I cared about was full time. The job I took ... was the only one open for an RD at the time and my partner had just been accepted into [a post-secondary institution] here."



**Table 5 - NODIP Graduates – Community and Personal Factors Affecting Choice of Position  
(Most Recent Position)**

	Factors	Importance of Factors							Ranked 1 <sup>st</sup> , 2 <sup>nd</sup> or 3 <sup>rd</sup> Most Important		
		Scale Category							1st	2nd	3rd
	Community and Personal Factors Influencing Choices	1	2	3	4	5	N/A	Range			
A	Home town	<u>5</u>			2	2	1	1-5	2		<u>2</u>
B	Size and population of community	2	<u>3</u>	2	2			1-4	1		
C	Comfortable in that type of town	1	3	2	2	2		1-5		2	1
D	Spouse or partner employed in area	<u>2</u>	1		<u>2</u>	<u>2</u>	<u>2</u>	1-5	<u>3</u>		
E	Spouse or partner completing education in area	1			1	2	<u>5</u>	1-5	2		
F	Proximity to family	2	1	1	<u>4</u>	1		1-5	1	<u>2</u>	2
G	Proximity to friends	3	2			<u>5</u>		1-5		<u>2</u>	1
H	Proximity to colleagues	<u>3</u>	2	1	2	1		1-5			1
I	Cultural and recreational opportunities	1	2	3	<u>4</u>			1-4	1		1
J	Lifestyle of the community	1	2	2	<u>5</u>			1-4		1	1
K	Quality of physical environment in the area	2	1	2	<u>5</u>			1-4		1	
L	Educational opportunities for self	1	2	2	<u>4</u>			1-4		1	
M	Educational opportunities for partner or spouse	1	1	2	1	1	<u>3</u>	1-5		1	
	Total # Responses	25	20	17	39	11	11				

Key: 1 = "not important", 2 = "somewhat important", 3 = "important", 4 = "very important", 5 = "extremely important" and n/a = "not applicable". (Modal categories are underlined.)

## PREPARATION FOR PRACTICE

As a central focus of the pilot study, NODIP graduates were asked to assess the impact of their internship on their subsequent practice, by evaluating how well the program prepared them to apply the knowledge and skills that they had acquired. With respect to their most recent position, they were asked to assess skill areas using a Likert-format scale (1 = “not well prepared”, 2 = “somewhat prepared”, 3 = “prepared”, 4 = “very prepared”, and 5 = “extremely well prepared”). An additional option identified “not applicable” items. Combining the numbers of respondents who were “very prepared” or “extremely well prepared” as an indicator of high levels of preparedness, the data suggests that NODIP very effectively prepared its graduates by giving them a wide array of skills required for clinical practice.

### ***How well did the internship prepare graduates for nutrition practice?***

Examining the 13 skills required for clinical and community nutrition practice, the data underlines the fact that NODIP graduates considered themselves more than “prepared” in terms of the skills required for their subsequent practice. There were, however, some variations shown in levels of preparedness in specific skills. This was shown by examining the numbers of respondents who considered they were “very prepared” or “extremely well prepared” in each area ([Table 6](#)):

- Success was most evident in the area of counselling and coaching clients: all 10 graduates were “very prepared” or “extremely well prepared” in this area. Most were confident in their abilities to understand determinants of healthy eating (n = 9), apply principles of education (n = 9) and interviewing skills (n = 8).

- More than one-half of graduates saw themselves as being highly prepared for practice (n = 6 for each). As one participant noted, their rural and northern internships meant that they were prepared very well “for health promotion in general.”
- Four of the ten graduates saw themselves as having high levels of preparedness for more specialized roles, including counselling and coaching staff, program planning or evaluation, as well as food service practice. Just two individuals indicated that they were “well prepared” regarding quality assurance; none saw themselves “very” or “extremely” well-prepared in the area of financial management. A number of graduates, however, noted that some skills, including food service practice (n = 4) or financial management (n = 3) were not applicable to their current positions.

**Table 6 - NODIP Graduates - How Well Prepared for Dietetic Practice (Practice Application and Related Skills)**

Practice Application		How Well Prepared						
Skills	Scale Category							
	1	2	3	4	5	N/A	Range	
A	Clinical nutrition practice			3	<u>5</u>	1	1	3-5
B	Interviewing skills			2	<u>7</u>	1		3-5
C	Counselling or coaching clients				<u>7</u>	3		4-5
D	Counselling or coaching staff		1	<u>5</u>	3	1		2-5
E	Using principles of education			1	<u>6</u>	3		3-5
F	Community nutrition practice		1	2	<u>4</u>	2	1	2-5
G	Needs assessment		1	2	<u>5</u>	1	1	2-5
H	Understanding determinants of healthy eating			1	<u>8</u>	1		3-5
I	Program planning		1	<u>5</u>	3	1		2-5
J	Program evaluation	1	1	<u>4</u>	<u>4</u>			1-4
K	Food service practice			2	<u>4</u>		<u>4</u>	1-3
L	Financial management	1	<u>3</u>	<u>3</u>			<u>3</u>	1-3
M	Quality assurance experience		2	<u>5</u>	2		1	2-4
	Total # of responses	2	10	35	58	14	11	
Key: 1 = “not well prepared”, 2 = “somewhat prepared”, 3 = “prepared”, 4 = “very prepared”, 5 = “extremely well prepared” and n/a = “not applicable”. (Modal categories are <u>underlined</u> .)								

### ***Did the internship effectively prepare graduates for leadership roles?***

Results further demonstrate that participation in the internship program assisted respondents to become effective leaders by acquiring research and related practice skills. Looking at the 16 skills categories evaluated, it is clear that NODIP graduates viewed their program very positively: three-quarters of responses were in the “very prepared “ or “extremely well prepared” categories, indicating a high level of preparedness. There were, however, some differences across specific skills areas ([Table 7](#)):

- Graduates were very confident about their abilities to deliver effective client-centred and interprofessional care; all saw themselves as highly prepared in these areas (n = 10). They were equally confident that they had learned the skills required to communicate effectively with clients and coworkers, as measured by high levels of preparedness around communication and presentation skills (n = 10 for each category).
- Almost all NODIP participants believed they had acquired the necessary attributes to function effectively in complex work environments, including time management (n = 10), critical judgment (n = 9) and applied ethics skills (n = 9). More than one-half of respondents saw themselves as well prepared in terms of their management abilities, including their problem-solving (n = 8), facilitation (n = 7), teamwork and leadership skills (n = 6 in each).
- A majority of the cohort considered themselves well prepared to provide evidence-based practice (n = 8) and apply research methodology (n = 6). There was less certainty, however, around having the advanced skills required to develop project proposals (n = 4).
- Very few graduates, however, considered themselves “very prepared” or “extremely well-prepared” regarding the skills to deliver culturally-appropriate care (n = 2) or advocacy (n = 2).

**Table 7 - NODIP Graduates - How Well Prepared for Leadership Roles  
(Research and Related Practice Skills)**

Research and Related Practice		How Well Prepared						
Skills		Scale Category						
		1	2	3	4	5	N/A	Range
A	Developing project proposals			<u>4</u>	3	1	2	3-5
B	Using evidence based practice			2	<u>7</u>	1		3-5
C	Using research methodology			4	<u>5</u>	1		3-5
D	Teamwork		2	2	<u>3</u>	<u>3</u>		2-5
E	Critical judgment			3	3	<u>4</u>		3-5
F	Problem-solving techniques			2	<u>6</u>	2		3-5
G	Leadership			<u>4</u>	<u>4</u>	2		3-5
H	Time management				<u>5</u>	<u>5</u>		4-5
I	Applying ethics to daily practice		1		<u>7</u>	2		2-5
J	Interprofessional care				<u>7</u>	3		4-5
K	Client-centred care				<u>6</u>	4		4-5
L	Oral communication skills				<u>6</u>	4		4-5
M	Presentation skills				<u>6</u>	4		4-5
N	Facilitation skills		1	2	<u>7</u>			2-3
O	Advocacy		<u>4</u>	<u>4</u>	2			2-3
P	Culturally-appropriate care		2	<u>5</u>	2	1		2-5
Total # Responses			10	32	79	37	2	
Key: 1 = "not well prepared", 2 = "somewhat prepared", 3 = "prepared", 4 = "very prepared", 5 = "extremely well prepared" and n/a = "not applicable". (Modal categories are <u>underlined</u> .)								

## **FUTURE CAREER PLANS**

### ***How long do graduates expect to stay in their current positions?***

To assess possible effects of the NODIP experience on future career intentions, the survey asked respondents to provide information about their career plans over the next five years. Questions asked them how long they expected to stay in their present position and indicate any reasons for leaving or staying between. Their responses reveal that most graduates do not plan to stay in their current position for long ([Table 8](#)):

- One-half (5) of the respondents intend to work with current employer just a short time and expect to leave within the next two years.
- Three people have longer-term work commitments, one anticipating working two to five years and two planning on staying with their current employers for more than six years.
- Two of the NODIP graduates, however, were unable to envision their career plans at the present time.

**Table 8 - NODIP Graduates - How Long They Plan to Stay in Current Position  
(Number of Years)**

<b>Category</b>	<b># Respondents</b>
Less than 2 years	5
2 – 5 years	1
6 years or more	2
Do not know at this time	2

### ***Why do graduates plan on leaving or staying in their current positions?***

Graduates who planned to leave in less than two years or stay between two and five years were invited to share information about the reasons for leaving or staying. As shown in [Table 9](#), their responses reveal that their degree of satisfaction with working conditions, expectations around career development and professional growth, as well as ongoing personal commitments to family and friends shape their decisions around leaving or staying:

- Four graduates, who were currently working in non-permanent positions, emphatically stated they would leave if offered a position with “better salary and benefits.” Those employed in part-time or relief positions, for example, would leave if “full-time permanent positions” became available.
- Dietitians working on contracts (n = 2) would leave at the end of their term if there “were no other employment opportunities with [their] current employer” or “no other positions in the community;” conversely, they would stay “if the contract was extended.”

**Table 9 - NODIP Graduates - Reasons for Leaving Position in Less Than 2 Years or Staying Between 2 and 5 Years**

<b>Category (Multiple responses, open-ended question)</b>	<b># Responses</b>
<i>In less than 2 years</i>	
Full-time position and/or better salary and benefits	4
End of contract and no other position for dietitian available in area	2
Unhappy with current position, disinterested in work	3
Not enough opportunity for professional growth , specialization	4
Spouse or partner relocation anticipated, uncertain life commitments	3
Total number of responses	16
<i>More than 2 years but less than 5 years</i>	
Contract extension	1
If spouse or partner finds employment in area	1
Move to be closer to friends and family	1
Total number of responses	3

- Dissatisfaction with current employers and disinterest in the type of nutrition practice prompted some graduates to consider leaving their current positions (n = 3). One respondent, for example, stated that she would leave because she was “not happy with current management.” Another graduate stated she was “not experiencing enough professional growth” in her current position. A third individual “would move into a different area of dietetics,” if such positions became available, because her “current work was not very exciting.”
- The absence of opportunities for professional growth and acquisition of specialized skills or expertise (n = 4) also was an additional factor that caused some graduates to consider changing employers. A graduate who expected to move would do so because she was “interested in expanding knowledge in other areas and experience[ing] new communities.” She added that she would have to relocate to find opportunities to advance her skills or work with new client groups, because “there were no other Registered Dietitian positions in current community.”

At the time of the survey, all NODIP graduates were young (25 to 31 years of age) and more than one-half had never been married (n = 6). Personal commitments, however, were an important consideration that shaped their future career plans:

- Of the four people that were married or in a common law relationship, three lived in the same community as their partner; the remaining person commuted to work a short distance away. All anticipated that they would relocate within the next five years to accommodate their spouse’s or partner’s work situations.
- Two graduates stated they would leave their current employer when their partner completed their education; however, one individual would consider remaining if “employment for [her] spouse” was available locally. Another person would relocate within the next year to join her spouse who recently had been transferred to another community. Moving “to be closer to friends and family members” was mentioned as a reason for possible relocation within the next few years.



### ***Where would graduates ideally like to practice?***

Given a choice of ideal practice locations, NODIP graduates were strongly divided ([Table 10](#)). One-half of the cohort (n = 5) expressed an interest in large urban areas of more than 100,000 people; almost as many (n = 4) would consider practice in a regional centre (population 25,000 to 99,999). An equivalent number were open to the idea of practicing in non-metropolitan areas, including large towns (2), small towns (n = 1) or rural communities (n = 1).

**Table 10 - NODIP Graduates - Ideal Community in Which They Would Like to Practice**

<b>Category (Multiple Responses)</b>	<b># Responses</b>
Rural community (up to 4,999 population)	1
Small town (5,000 – 9,999 population)	1
Large town (10,000 – 24,999 population)	2
Regional centre (25,000 – 99,999 population)	4
Large urban area (100,000 population or more)	5
Total # responses	21

Multiple response cross-tabulation of their preferences by their current community classified by population,<sup>50</sup> suggested that graduates generally wanted to practice in towns that were the same population or only slightly larger than the communities in which they currently resided ([Table 11](#)). Three of the four graduates who were currently living in regional centres, for example, indicated a preference for working in another regional centre; the fourth, however, wanted to work in a large urban area.

<sup>50</sup> Statistics Canada. (2008). *Community Profiles*. 92-591-XWE. Released July 24, 2008. Retrieved November 1, 2010 from <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>

**Table 11 - NODIP Graduates - Current Community Type by Ideal Community**

Ideal Community	Current Community (Multiple Response Cross-Tabulation)					
	Rural	Small town	Large town	Regional centre	Large urban area	Total
Rural community	1					1
Small town	1					1
Large town	1	1				2
Regional centre		1		3		4
Large urban area				1	4	5
# Responses	3	2		4	4	13

Note: Current community type coded by population size.

Reflecting the patterns identified in the literature on rural recruitment and retention, those who had a rural background (defined as having lived during childhood or completed high school in town with population less than 100,000), expressed a preference for living in non-metropolitan areas ([Table 12](#)):

- Five of the six dietitians who had a rural background wanted to work in communities with populations below 100,000; the sixth person preferred a large urban centre. Conversely, all of the dietitians who had been raised in large urban centres preferred to work in metropolitan communities.

**Table 12 - NODIP Graduates - Ideal Community Type by Rural Background**

Ideal Community	Rural Background (Multiple Response Cross-Tabulation)		
	Yes	No	Total
Rural Community	1		1
Small town	1		1
Large Town	2		2
Regional centre	4		4
Large urban area	1	4	5
# Responses	9	4	13

Note: Rural background = lived during childhood or completed high school in community less than 100,000 population

## SUMMARY

The principal goal of this pilot study was to assess the feasibility of using a survey questionnaire to document the employment experiences of the 2008 cohort of NODIP graduates. A secondary goal was to examine the data produced to assess graduates' opinions on the NODIP program. Specific objectives were: (a) to document NODIP interns' employment choices since graduation and their career intentions; (b) to understand their opinions on how well NODIP has prepared graduates for dietetic practice in northern and rural communities; and (c) to assess how well the research methodology and instruments perform in assessing graduates' employment and internship experiences.

### ***Graduates' Current Employment***

The survey captured a considerable amount of information about the 2008 NODIP cohort's employment experiences and career intentions. It revealed that all of the graduates obtained employment either during their internship or within the first six months after graduation. As evidence of the internship program's success in preparing graduates for northern and rural practice, nine of the ten graduates were currently working with organizations that serve clients in rural or northern communities. This is impressive, in light of the fact that four of the program's participants had spent their childhood and high school years in metropolitan areas:

- NODIP graduates were currently employed in a variety of settings, including rural hospitals, diabetic care programs, outpatient medical clinics or long-term care organizations. Their principal positions were as clinical dietitians, although employment as public health or sole charge dietitians was reported.

- Seven of the graduates currently were employed on a full-time basis, four were employed part-time, and two held casual or relief positions. Employment in multiple practice settings or for multiple employers was common.
- Prior knowledge of employers (especially during internship) but not offers of incentives, influenced employment choices. In terms of practice factors, opportunities for broad experience, continuing development and education were important.
- Preferred practice areas, professional supports, quality of the work environment, opportunities for interprofessional practice and previous experience affected their employment decisions.
- Personal and community factors, including proximity to friends and family, lifestyle options and quality of the physical environment, however, were judged as being most relevant.

### ***Internship Evaluation***

As a central focus of the pilot study, NODIP graduates were asked to assess the impact of their internship on their subsequent practice by evaluating how well the program prepared them to apply the knowledge and skills acquired. The data suggests that the program effectively prepared its graduates for entry-level practice; however, there was less certainty about preparation for more specialized roles:

- All ten graduates felt well prepared in the area of counselling and coaching clients. A majority were equally confident about their preparation in understanding the determinants of healthy eating, applying principles of education and interviewing skills.
- Overall, they saw themselves as being highly prepared for clinical and community practice. Fewer than one-half, however, felt equivalently well prepared to assume more specialized roles, including counselling staff, program planning, evaluation, quality assurance or financial management.
- NODIP graduates were very confident about their abilities to deliver effective client-centred care in team-based inter-professional environments. They were equally confident that they had learned to communicate effectively with clients and coworkers.

- Most believed they had the necessary attributes to function well in complex work environments, using the effective time management, critical judgment and applied ethics skills they had acquired during their internships.
- A majority of the cohort considered themselves very well prepared to provide evidence-based practice and apply research methodologies. There was less certainty, however, around having the advanced research skills required to develop project proposals. Some graduates also felt that they had not developed the specialized skills needed to provide culturally-appropriate care or advocacy.

### ***Career Intentions***

Most of the graduates do not intend to stay in their current positions very long, with one-half planning to leave within the next two years. Their decisions around leaving or staying reflected many of the factors that have been identified in the literature as affecting allied health professional retention in rural or isolated communities. Working conditions, career plans and personal considerations influenced NODIP graduates' practice location expectations:

- Working conditions, especially the availability of permanent or ongoing positions with enhanced salary and benefits, were a primary consideration for graduates contemplating changing employment. Those working in part-time or relief positions would leave if full-time positions became available. Employees in temporary positions would leave at contract end if no other opportunities were available.
- Dissatisfaction with current employers and disinterest in the type of nutrition practice available prompted graduates to consider leaving their current position. Participants in the pilot who expected to leave their current positions within the next two years, for example, cited poor management, lack of opportunities for professional growth and limited practice options as reasons for anticipated relocation.

- The absence of opportunities for professional growth, as well as interest in acquiring more specialized skills or expertise in working with different client groups were additional factors encouraging some graduates to consider changing employers.
- Ongoing personal commitments also influenced career intentions. Four individuals anticipated that they would relocate within the next five years to accommodate their spouse's or partner's work situations. Others thought they eventually would change practice locations to be closer to family and friends.
- Given an ideal choice of community, one in every two of the NODIP graduates would like to work either in larger urban areas or regional centres; only two individuals expressed a preference for small towns and one wished to work in a rural area.

### ***Methodological Considerations***

As shown by the findings summarized above, the methodology and instruments performed well in assessing NODIP graduates' experiences during their first two years of practice. The questionnaire also allowed them to evaluate their internship experience, identifying areas in which they felt very well-prepared for practice. Should the tracking study proceed, the addition of further questions and response categories would ensure that the full spectrum of recruitment and retention issues identified in the allied health literature were included.<sup>51</sup> Elaboration of management<sup>52</sup> or gender-related<sup>53</sup> practice issues, for example, would be useful.

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<sup>51</sup> Wilson, N., Couper, I., De Vries, E., Reid, S., Fish, T., & Marais, B. (2009). A critical review of interventions to redress the inequitable distribution of healthcare professionals to rural and remote areas. *Rural and Remote Health*, 9(2): 1060. (Online).

<sup>52</sup> Stagnitti, K., Schoo, A., Dunbar, J. & Reid, C. (2006). An exploration of issues of management and intention to stay: allied health professionals in South West Victoria, Australia. *Journal of Allied Health*, 35(4): 226 - 232.

<sup>53</sup> Lindsay, S. (2007). Gender differences in rural and urban practice location among mid-level health care providers. *Journal of Rural Health*, 23(1): 72 - 76.

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## **APPENDICES**



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APPENDIX A

Questionnaire

“Pilot Project: Tracking Survey for the Northern Ontario Dietetic Internship Program”

# \_\_\_\_\_

This questionnaire is part of a pilot study tracking graduates from the Northern Ontario Dietetic Internship Program (NODIP), which the Centre for Rural and Northern Health Research (CRaNHR) at Lakehead University is conducting on behalf of the Northern Ontario School of Medicine.

Our purpose is to document the employment experiences of NODIP graduates, with a view to assessing how well the program has prepared them for dietetic practice. We are also interested in where graduates choose to practice, the types of practice they prefer, their career intentions and, to help us better understand their employment decisions, how community and personal factors affect their choices.

Over the next few years, we hope to use surveys like this to help us assess how a program like NODIP, which has a unique focus on practice in rural and northern communities, prepares graduates for practice. Please take the time to fill out the questionnaire and share your experiences with us.

Instructions: Please provide a response to each question by placing an “X” in all checkboxes that apply or by filling in the text on the lines provided. When you have completed the survey and signed the consent form, return both forms using the postage-prepaid envelope. If you have any questions, please contact:

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**A. YOUR EMPLOYMENT HISTORY**

1. Year Graduated from Internship Program

- 2008  
 2009  
 2010

2. Name of Community and Province or Territory in which you are currently living:

Community: \_\_\_\_\_

Province/Territory:

- British Columbia  
 Alberta  
 Saskatchewan  
 Ontario  
 Quebec  
 New Brunswick  
 Nova Scotia  
 Newfoundland & Labrador  
 Prince Edward Island  
 Northwest Territories  
 Nunavut  
 Yukon  
 Living outside of Canada (Please indicate Country/City):

\_\_\_\_\_

3. At what point after graduation did you find employment in the field of dietetics:

- During the internship program  
 Within 2 months of graduation  
 Within 3 to 6 months of graduation  
 More than 6 months after graduation  
 Have not found work in my field  
 Other (Please explain):

\_\_\_\_\_  
 \_\_\_\_\_

4. Please indicate, in chronological order, each position/community in which you have practiced after you completed the internship program. (For each position, indicate *the start year, the end year, duration in months* and, if you have left a position, the *reason* for leaving that position). [If you require additional space, please use the back of this page.]

Position #	Start (Year)	End (Year)	Duration (Months)	Location (Community, Province)	Reason for Leaving Position
1st					
2 <sup>ND</sup>					
3 <sup>RD</sup>					
4 <sup>TH</sup>					
5 <sup>TH</sup>					

5. Did you relocate to gain employment in your *first* position, after graduation?

- No  
 Yes, within province  
 Yes, within Canada  
 Other (please indicate location):  


---

6. Did you relocate to gain employment in your *most recent* position?

- No  
 Yes, within province  
 Yes, within Canada  
 Other (please indicate location):  


---

7. Are you presently employed?

- |                          |   |   |  |
|--------------------------|---|---|--|
| <input type="checkbox"/> | Full-time – permanent   | ➔ | <input type="checkbox"/> 1 employer<br><input type="checkbox"/> more than 1 employer |
| <input type="checkbox"/> | Full-time – non-permanent<br>(e.g. maternity leave, contract) | ➔ | <input type="checkbox"/> 1 employer<br><input type="checkbox"/> more than 1 employer |
| <input type="checkbox"/> | Part-time – BY CHOICE   | ➔ | <input type="checkbox"/> 1 employer<br><input type="checkbox"/> more than 1 employer |
| <input type="checkbox"/> | Part-time –NOT BY CHOICE                                      | ➔ | <input type="checkbox"/> 1 employer<br><input type="checkbox"/> more than 1 employer |
| <input type="checkbox"/> | Relief/casual/occasional – BY CHOICE                          |   |  |
| <input type="checkbox"/> | Relief/casual/occasional – NOT BY CHOICE                      |   |  |
| <input type="checkbox"/> | Not employed –BY CHOICE                                       |   |  |
| <input type="checkbox"/> | Not employed – NOT BY CHOICE                                  |   |  |

**B. YOUR MOST RECENT POSITION**

8. Check all the categories which best represent your most recent employer(s):

- Urban hospital
  - Rural hospital
  - Outpatient/Medical clinic
  - Family Health Team
  - Community Health Centre
  - Diabetic Care Program
  - Home Care
  - Long Term Care
  - Public Health
  - Business/Industry
  - Self Employed
  - Other:
- 

9. Check all the categories which best describe your most recent principal position(s):

- Clinical dietitian
  - Administrative dietitian
  - Manager or director related to dietetics
  - Food service supervisor
  - Sole charge dietitian
  - Community dietitian
  - Public Health dietitian
  - Education, research, teaching
  - Sales or marketing
  - Private Practice
  - Other:
- 

10. Did your employer offer any incentives to fill the position?

- Yes → GO TO QUESTION #11
- No → GO TO QUESTION #12



11. If your employer offered incentives, please indicate all that apply:

- Relocation allowance
- Reimbursement of moving expenses
- Signing bonus
- Housing allowance
- Retention bonus
- Employer pays the Registration Exam fee
- Employer pays the Provincial registration fee
- Employer pays the Dietitians of Canada Membership fee
- Employer pays fees and travel expenses for conferences, workshops
- Employer covers costs of distance education courses
- Other paid continuing education or professional development (specify):

---



---

Other incentives, please describe:

---



---



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12. Did you know anything about your most recent employer, prior to applying for the position?

- No
- Yes, volunteered with them
- Yes, completed internship placement with them
- Yes, worked for them prior to internship
- Yes, knew people who worked with them
- Yes, other knowledge, please describe how you learned about employer:

---



---

**C. WHY YOU ACCEPTED YOUR MOST RECENT POSITION**

13. How important was each of the following *practice factors* in influencing where you accepted your most recent position?  
Please use the following scale:

1	2	3	4	5	N/A
Not Important	Somewhat Important	Important	Very Important	Extremely Important	= [Not applicable]

Item	Practice Factors	1	2	3	4	5	N/A
A	Practice area preferred						
B	Full-time permanent position						
C	Full- time position (non permanent)						
D	Part-time permanent position						
E	Part-time position (non permanent)						
F	Flexible employment (hours of work, conditions)						
G	Opportunity for continuing professional education						
H	Opportunity for professional support						
I	Opportunity for career advancement/promotion						
J	Opportunity for broad experience						
K	Opportunity to specialize						
L	Opportunity to work with cultural/ethnic groups						
M	Aware of need for dietitians in area						
N	Incentives / allowances						
O	Salary						
P	Previous contact / knowledge of agency staff						
Q	Quality of work environment						
R	Previous experience in practice area						
S	Opportunities for interprofessional practice						
T	Other (please specify):						

14. Of these practice factors (question 13), which were the 3 *most important* in determining where you accepted your position? Place an "X" under the corresponding letter:

Most Important	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1st																				
2nd																				
3rd																				

15. How important was each of the following *community and personal factors* in influencing where you accepted your current position?  
Please use the following scale:

1	2	3	4	5	N/A
Not Important	Somewhat Important	Important	Very Important	Extremely Important	= [Not applicable]

Item	Community and Personal Factors	1	2	3	4	5	N/A
A	Home town						
B	Size and population of community						
C	Comfortable in that type of town						
D	Spouse/partner employed in area						
E	Spouse/partner completing education in area						
F	Proximity to family						
G	Proximity to friends						
H	Proximity to colleagues						
I	Cultural and recreational opportunities						
J	Lifestyle of the community						
K	Quality of physical environment in the area						
L	Educational opportunities for self						
M	Educational opportunities for partner/spouse						
N	Other (please specify):						

16. Of these community and personal factors (question 15), which were *the 3 most important* in influencing where you accepted your most recent dietetic practice? Place an "X" under the corresponding letter:

Most Important	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1st														
2nd														
3rd														

**D. HOW WELL YOUR INTERNSHIP PREPARED YOU FOR YOUR MOST RECENT POSITION**

17. How well did your Internship prepare you for each of the following aspects of *Clinical and Community Practice* found in your most recent position?

Please use the following scale:

1	2	3	4	5	N/A
Not	Somewhat	Prepared	Very	Extremely	=
Well Prepared	Prepared		Prepared	Well Prepared	[Not applicable]

Item	<i>Application of Practice and Related Skills</i>	1	2	3	4	5	N/A
A	Clinical nutrition practice						
B	Interviewing skills						
C	Counselling or coaching clients						
D	Counselling or coaching staff						
E	Using principles of education						
F	Community nutrition practice						
G	Needs assessment						
H	Understanding determinants of healthy eating						
I	Program planning						
J	Program evaluation						
K	Food service practice						
L	Financial management						
M	Quality assurance experience						
N	Other (please specify):						

18. How well did your Internship prepare you for each of the following aspects of *Research and Related Practice Skills* found in your current position?

Please use the following scale:

1	2	3	4	5	N/A
Not	Somewhat	Prepared	Very	Extremely	=
Well Prepared	Prepared		Prepared	Well Prepared	[Not applicable]

Item	<i>Research and Related Practice Skills</i>	1	2	3	4	5	N/A
A	Developing project proposals						
B	Using evidence based practice						
C	Using research methodology						
D	Teamwork						
E	Critical judgment						
F	Problem solving techniques						
G	Leadership						
H	Time management						
I	Applying ethics to daily practice						
J	Interprofessional care						
K	Client-centred care						
L	Oral communication skills						
M	Presentation skills						
N	Facilitation skills						
O	Advocacy						
P	Culturally appropriate care						
Q	Other (please specify):						

**E. YOUR CAREER PLANS OVER THE NEXT 5 YEARS**

19. How long do you plan to remain in the position where you currently practice?

- |                          |                          |   |               |
|--------------------------|--------------------------|---|---------------|
| <input type="checkbox"/> | Less than 2 years        | → | See (A) below |
| <input type="checkbox"/> | 2-5 years                | → | See (B) below |
| <input type="checkbox"/> | 6 years or more          |   |               |
| <input type="checkbox"/> | Do not know at this time |   |               |
| <input type="checkbox"/> | Not currently practicing |   |               |

(A). If you plan to leave your position in *less than 2 years*, what might be the reason(s)?

<i>i.</i>
<i>ii.</i>
<i>iii.</i>

(B). If you plan to stay in your position in more *than 2 years but less than 5 years*, what might be the reason(s)?

<i>i.</i>
<i>ii.</i>
<i>iii.</i>

20. Ideally, in what size of community would you like to practice?

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | Rural community (up to 4,999 population)        |
| <input type="checkbox"/> | Small town (5,000- 9,999 population)            |
| <input type="checkbox"/> | Large town (10,000-24,999)                      |
| <input type="checkbox"/> | Regional centre (25,000 -99,999)                |
| <input type="checkbox"/> | Large urban area (more than 100,000 population) |

**F. YOUR COMMUNITY AND EDUCATIONAL BACKGROUND**

21. In what size of community and in which province/territory did you spend most of your childhood? Complete high school?

	<i>Spent Most of Childhood In:</i>	<i>Competed High School In:</i>
<i>Size of Community:</i>	<input type="checkbox"/> Rural community (less than 4,999)	<input type="checkbox"/> Rural community (less than 4,999)
	<input type="checkbox"/> Small town (5,000- 9,999)	<input type="checkbox"/> Small town (5,000- 9,999)
	<input type="checkbox"/> Large town (10,000-24,999)	<input type="checkbox"/> Large town (10,000-24,999)
	<input type="checkbox"/> Regional centre (25,000-99,999)	<input type="checkbox"/> Regional centre (25,000-99,999)
	<input type="checkbox"/> Large urban area (over 100,000)	<input type="checkbox"/> Large urban area (over 100,000)
<i>Province or Territory:</i>	<input type="checkbox"/> British Columbia	<input type="checkbox"/> British Columbia
	<input type="checkbox"/> Alberta	<input type="checkbox"/> Alberta
	<input type="checkbox"/> Saskatchewan	<input type="checkbox"/> Saskatchewan
	<input type="checkbox"/> Manitoba	<input type="checkbox"/> Manitoba
	<input type="checkbox"/> Ontario	<input type="checkbox"/> Ontario
	<input type="checkbox"/> Quebec	<input type="checkbox"/> Quebec
	<input type="checkbox"/> New Brunswick	<input type="checkbox"/> New Brunswick
	<input type="checkbox"/> Nova Scotia	<input type="checkbox"/> Nova Scotia
	<input type="checkbox"/> Newfoundland & Labrador	<input type="checkbox"/> Newfoundland & Labrador
	<input type="checkbox"/> Prince Edward Island	<input type="checkbox"/> Prince Edward Island
	<input type="checkbox"/> Nunavut	<input type="checkbox"/> Nunavut
<input type="checkbox"/> Northwest Territories	<input type="checkbox"/> Northwest Territories	
<i>Outside Canada</i>	<i>Country:</i>	<i>Country:</i>
	<i>City:</i>	<i>City:</i>

22. Name of the University where you received your undergraduate Nutrition Degree:

---

23. Please list any previous degrees or diplomas received:

a.
b.
c..

24. After you completed your internship, did you take other specialty training (e.g. Masters, CNSD, DEC)?

No  
 Yes → If Yes, in what specialty area(s) have you received training?

a.
b.

**G. YOUR PERSONAL INFORMATION**

25. Your gender:  Female  Male

26. Your year of birth: \_\_\_\_\_

27. What is your marital status?

- Never married
- Widowed
- Divorced
- Separated but still legally married
- Married/common-law → Go to questions below:

a. If married/common-law, what type of work does your partner do?


b. Does your partner work in the same community as you do?

Yes  No

If partner does not work in same community as you do,  
how far away does he/she work?

\_\_\_\_\_ km

**THANK YOU FOR THE TIME YOU HAVE TAKEN  
TO ANSWER THIS SURVEY.**

Your answers will help us assess the effectiveness  
of the Northern Ontario Dietetic Internship Program in achieving its goals.





Northern Ontario  
School of Medicine

## APPENDIX B

### Invitation

#### ***“PILOT PROJECT: TRACKING SURVEY for the Northern Ontario Dietetic Internship Program”***

Dear Graduate:

This is to request your participation in a pilot study tracking graduates from the Northern Ontario Dietetic Internship Program (NODIP). As NODIP is now into its third year, we thought it was time to hear our graduates’ opinions about their experiences, so we can better understand our program’s successes and identify areas for potential improvement.

We have asked the Centre for Rural and Northern Health Research (CRaNHR) at Lakehead University to conduct this evaluation for us. Should you choose to volunteer, you will be asked to complete a questionnaire on your employment experiences since graduating, your career intentions, and your perceptions of the way that NODIP has prepared you for practice.

The value of this research depends very much on the completeness of the data, so I am asking you to take the time fill out and return this questionnaire to CRaNHR. Your participation in this evaluation will be an important contribution to the continuing success of the Northern Ontario Dietetic Internship Program.

Many thanks for your assistance in this important research.

Yours sincerely,

Denise Raftis, M.Ed, RD  
Program Manager  
Northern Ontario Dietetic Internship Program  
Northern Ontario School of Medicine  
East Campus  
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[www.normed.ca](http://www.normed.ca)



Centre for Rural & Northern Health Research  
Centre de recherche en santé dans les milieux ruraux et du nord

APPENDIX C  
Covering Letter

“Pilot Project: Tracking Survey for the Northern Ontario Dietetic Internship Program”

Dear Graduate:

This is to request your participation in a pilot survey tracking graduates from the Northern Ontario Dietetic Internship Program (NODIP), which the Centre for Rural and Northern Health Research (CRaHR) at Lakehead University is conducting on behalf of the Northern Ontario School of Medicine (NOSM). Our purpose is to document the employment experiences of NODIP graduates, with a view to understanding how well the program has prepared them for dietetics practice. We are also interested in where graduates choose to practice, the types of practice they prefer, their career intentions, and, to help us better understand their employment decisions, how community and personal factors affect their choices. Over the next few years, we hope to use surveys like this to help us assess how NODIP, which has a unique focus on rural and northern communities, prepares graduates for practice in diverse settings.

You can assist in this evaluation by completing a written questionnaire, which will take approximately 20-30 minutes, and a consent form, which would give us permission to contact you regarding future NODIP tracking studies. Participation in this study is voluntary and you may answer the questions any way that you choose, decline to answer any question, or elect to withdraw your participation at any stage. There are no apparent risks associated with the research and your decision to take part in the study will not affect your professional relationships with NODIP, NOSM or your employers.

All information gathered will remain completely confidential and you will not be identified in any written reports or subsequent presentations of results. Paper copies of the survey will be secured in locked cabinets in the CRaHR office at Lakehead University for a period of five years after completion of the study, at which time they will be destroyed. Because survey data may be used in future NODIP tracking studies, electronic copies of the dataset, with identifying information removed, will be stored indefinitely and securely at CRaHR and NOSM. Only CRaHR researchers who are working on the survey will have access to all data, including identifying information; NODIP or NOSM faculty members will not have access to raw data. .. /2

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955 Oliver Road, Thunder Bay ON P7B 5E1

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935 Chemin du lac Ramsey Lake Road, Sudbury, ON P3E 2C6

I hope that you will agree that this initial evaluation of NODIP is important and will be prepared to help us carry it out by completing the questionnaire and consent form. If you have any questions about the study, please contact Dr. Mary Ellen Hill, Senior Researcher, at (807) 766-7278 or [maryellen.hill@lakeheadu.ca](mailto:maryellen.hill@lakeheadu.ca). All procedures for this study have been approved by the Lakehead University REB; for further information about consent or confidentiality issues, please contact Susan Wright at (807) 343-8283 or [susan.wright@lakeheadu.ca](mailto:susan.wright@lakeheadu.ca). You may obtain a summary of study findings by request from CRaNHR after the end of the project.

Yours sincerely,

Bruce Minore, Ph.D.  
Research Director



Centre for Rural & Northern Health Research  
Centre de recherche en santé dans les milieux ruraux et du nord

APPENDIX D

Consent Form

“Pilot Project: Tracking Survey for the Northern Ontario Dietetic Internship Program”

- I, \_\_\_\_\_, understand that the purpose of this study, as described in the covering letter, is to document the employment experiences of NODIP graduates, with a view to understanding how well the program has prepared them for dietetic practice.
- I acknowledge that the research has been explained to my satisfaction, that I am a volunteer in this study, can decline to answer any question, or elect to withdraw my participation at any stage. There are no apparent risks associated with the research and my decision to take part in the study will not affect my professional relationships with NODIP, NOSM or employers.
- I understand that paper copies of the survey will be secured in locked cabinets in the CRaHNR office at Lakehead University for a period of five years after completion of the study, at which time they will be destroyed. Because survey data may be used in future NODIP tracking studies, I understand that electronic copies of the dataset, with identifying information removed, will be stored indefinitely and securely at CRaHNR and NOSM. Only CRaHNR researchers who are working on the survey will have access to all data, including identifying information; NODIP or NOSM faculty members will not have access to raw data.
- Having read, understood, and had a full explanation of the research study, by signing this form I agree to take part in the survey and give permission for CRaHNR researchers to contact me regarding future NODIP tracking studies.

Signature: \_\_\_\_\_

Name (please print): \_\_\_\_\_

Date: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Email address: \_\_\_\_\_

Telephone: \_\_\_\_\_

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For further information, please contact:

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