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Beyond Supply and Demand investigates how networks facilitate or restrict advancement opportunities in Southern New Hampshire’s healthcare workforce. Findings are drawn from 50 qualitative in-depth interviews with employed health professionals at different stages of their careers, interviews with hospital human resource directors, and participation in statewide meetings and forums regarding workforce development, workforce diversity, and health equity. Policy recommendations highlight strategies to maximize the strength and productivity of New Hampshire’s healthcare workforce and economy.

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Introduction

Health professionals in Southern New Hampshire are asking critical questions as they navigate their careers:

- How can I contribute my skills and find meaningful work while earning a family-supporting wage?
- What are my options for advancement in the health sector?
- Will investing in my career pay off?

Meanwhile, employers are seeking well-trained and motivated professionals to ensure the delivery and reach of high quality health care. Educational institutions and workforce training programs are working to understand and bridge these needs within the context of a changing healthcare landscape. Trends include the implementation of the Affordable Care Act, an increased focus on quality and the reduction of health disparities, an aging patient population in need of care, and a diversifying workforce. These stakeholders face a shared dilemma: how to maximize the potential of individual workers, and the workforce as a whole, to keep New Hampshire’s health sector and its impacts strong.

This report presents recommendations for policy and practice in response to these trends. Employment policies and practices tend to focus primarily on the development of individual workers’ skills. In recent years, this focus has broadened to include advancement strategies so that health professionals can progress along a career ladder and secure jobs with higher wages and responsibilities. These policies are designed with the assumption that job seekers make objective career decisions and follow a path of linear steps over time to advance in their careers. However, the specialization of health occupations, and the complexity of career growth through ongoing skill development and transitions within and between employers, make current advancement pathways less direct. Today’s health career paths are non-linear, and are shaped by personal and
professional networks. These network resources operate below the surface, complementing and complicating other more visible career development factors, such as education and motivation. Job seekers engage in constant relational work over the course of their career, which influences who advances and who doesn't in the networked workforce.

The power of networks can be leveraged to keep pace with the changing healthcare and employment landscape to maximize potential in several ways:

1. **Bring network patterns to light**: Recognize the value of networks, understand how network patterns operate within programs and organizations, and reflect on how people secure, leverage, and pass on resources to shape careers.

2. **Expand opportunity through networks**: Ensure that existing programs and services reach the widest range of potential participants, teach job seekers to actively build professional networks, and guide network connectors to pass opportunities along in equitable ways.

3. **Structure transparent advancement opportunities**: Update education, training, and career advancement policies and programs, and improve transparency in advancement opportunities so people can progress in the absence of strong networks.

Personal and professional networks can create barriers to employment equity and can similarly play an important role in removing these barriers to expand opportunity. The data presented in this report inform concrete recommendations for educational institutions, workforce development programs, employers, healthcare professionals and leaders, and public policy-makers. This policy agenda is designed to create more effective educational institutions, workforce development programs, and human resource practices, opening career pathways.
The Networked Career

It is well known that networks play a strong role in shaping careers and career opportunities,¹ and in recent years the use of social networking sites such as LinkedIn has taken networking to a new level. But virtual networking is still a relatively new agent of opportunity, and relationships formed and maintained over the course of entire careers and lifetimes continue to form the foundation of health career networks in Southern New Hampshire.

IASP asked 50 successfully employed health professionals in Southern New Hampshire how they advanced in their careers. Only a few respondents mentioned networks while telling their story. But with prompting, most agreed that the role of networks is “huge,” as if it was an obvious yet unspoken dimension of their careers. Some interviewees used networking as part of an intentional career development strategy or one way to get in the door at a specific organization.

“I think networking is huge. I mean, if you can be part of an organization or coalition that is associated with that healthcare facility or volunteer...[you can get in the door].”

At the policy level, common knowledge about the power of networks also lies under the surface. This knowledge is rarely translated into employment policies and practices in ways that strengthen institutions and support career advancement. In addition, researchers are only now beginning to understand how networks may contribute to inequalities within or across different levels of the labor market, influencing which groups do or do not advance.²

By studying career networks in a specific sector and geographic region, this study zeroes in on the relationships and resources that help people advance. The following section demonstrates how networks transmit opportunities for Southern New Hampshire’s healthcare workforce, shaping careers over time (See Figure 4 on page 12 for the occupations held by interviewees).³
Relationships and Resources

*Resources are passed through networks, resulting in opportunity*

Relationships + Resources = Networks

The term “network” in this report refers to the structure of relationships between individuals, as well as between individuals and programs or institutions—their network ties—and the different types of resources, or assets, passed on through these relationships. Health professionals in Southern New Hampshire commonly use their networks to find jobs through referrals, recommendations, and direct recruitment. But the job matching process, while critical, represents only one aspect of the power of networks. Careers are shaped by networks in much more complex ways, impacting health professionals’ potential to advance and access good jobs. Figure 1 lists the most common network resources accessed by respondents over the course of their career.

**Figure 1. Resources Passed through Career Networks**

**Information and Knowledge**
- Information about the field, job openings, organizations, or programs
- Exchange of knowledge on the job
- Information about applicants

**Material Resources**
- Financial aid
- Supportive services
- Referrals to programs

**Social and Professional Support**
- Encouragement
- Role models
- Informal mentoring or training

**Job Matching**
- Job referrals
- Recommendations
- Direct recruitment
Network ties can be professional or personal

Figures 2 and 3 list the types of network ties that assist health professionals in their career over time and the resources most commonly passed along through those ties. Professional ties are developed in spaces and through institutions that are traditionally thought of as related to employment. They include named individuals, such as a specific professor or mentor, programs such as leadership or workforce programs,

**Figure 2. Professional Network Ties and Resources**

<table>
<thead>
<tr>
<th>Identified Network Tie</th>
<th>Career Resources and Benefits Offered by Network Tie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher or Professor</td>
<td>Information about local employers, mentor, role model, emotional support and encouragement, recommendation, job connections</td>
</tr>
<tr>
<td>School or Educational Program</td>
<td>Education which helps do job well, entry-point into field, space to meet classmates and professors who become friends and lifelong colleagues, often facilitates practicum or first clinical placement</td>
</tr>
<tr>
<td>Classmate</td>
<td>Emotional support, over time becomes colleague, information about jobs and organizations, sharing of resources for school and work</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Direct assistance with job advancement, flexibility in job schedule for classes, information about the field, reference, or blocking through strict rules preventing activities that result in advancement</td>
</tr>
<tr>
<td>Employer</td>
<td>Professional development opportunities, flexible scheduling, tuition reimbursement, space to meet other professionals in field</td>
</tr>
<tr>
<td>Professional Advisor or Mentor</td>
<td>Models how to do the work or advance in the field. Can be formal and recognized, but is more often admired and unrecognized</td>
</tr>
<tr>
<td>Coworker or Colleague</td>
<td>Creates an environment of either positive or negative support on the job and in the overall field, encouragement to advance, over time can offer reciprocity to each other, shares job openings</td>
</tr>
<tr>
<td>Case Manager</td>
<td>Information, guidance, and referrals for resources, acts as a coach, provides emotional support</td>
</tr>
<tr>
<td>Job Developer</td>
<td>Direct assistance with job placement through information on openings, or liaising with employers and maintaining an extensive network of contacts with people who hire</td>
</tr>
<tr>
<td>Workforce Development Program</td>
<td>Financial assistance with tuition for education and training programs and associated expenses for training and placement into a better job, guidance and information about occupations, links to employers</td>
</tr>
<tr>
<td>Leadership or Scholarship Program</td>
<td>Access to role models and new professional contacts, resulting in expanded social support, encouragement, and information about what is possible in a specific field or in themselves</td>
</tr>
<tr>
<td>Military</td>
<td>Structured advancement programs with financial assistance for education and training to enter specific fields, health and other benefits which may partially cover the person and their family while pursuing advancement (job searching or in school)</td>
</tr>
<tr>
<td>Public Assistance Program</td>
<td>Financial assistance to survive in periods of unemployment, underemployment, or transition, health and other benefits which may partially cover the person and their family while pursuing advancement (job searching or in school)</td>
</tr>
<tr>
<td>Professional Association</td>
<td>Forum for developing relationships with leaders in a specific field, provides information and role models who hold specific roles in the field, professional development opportunities</td>
</tr>
</tbody>
</table>
organizations such as a place of employment or professional association, social institutions such as churches or the military, and different types of job supports in the form of public assistance. Personal ties are those that individuals already have or develop on their own, outside of traditional employment spaces. These include family members and partners, friends and acquaintances, community leaders and institutions not related to employment, and internet resources.

**Resources exchanged go above and beyond expected, formal roles**

As workers move through institutions, programs, and organizations designed to meet certain employment needs, they also access resources from ties in both personal and professional realms in ways that defy traditional roles. For example, one of the most commonly identified ties was the professor/student relationship. Interviewees rarely discussed the fact that the person was a good teacher (the formal role of a professor). Instead, professors were identified as role models and mentors, positive influences who encouraged and bolstered participants to continue and succeed when times got tough, friends with whom they maintained contact over time, and connectors for employment.

In health care, many professors are also clinical experts and leaders in their field with extensive contacts and knowledge of places of employment. So while they fulfill the expected and formal function of providing letters of recommendation for students who request them, as these professors go about their daily lives, they also move in spaces and interact with their own networks in ways that enable them to pass opportunities to the students with whom they have positive relationships. One nurse professor described these types of interactions, referencing a time when she was in a work setting and ran into another nurse colleague who is also a friend.

“Or the fact they [nurse friends] work there [at an employer where the student wants to work] and they say to them ‘I just told so and so to come over and apply. You’re going to love her.’ It’s not even like we’re calling. We’re talking to the people and you’re seeing them all the time.”

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**Figure 3. Personal Network Ties and Resources**

<table>
<thead>
<tr>
<th>Identified Network Tie</th>
<th>Career Resources and Benefits Offered by Network Tie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Members</td>
<td>Encouragement and emotional support, guidance if experienced in the same field, support with home responsibilities</td>
</tr>
<tr>
<td>Partner</td>
<td>Co-parenting, sharing home responsibilities, emotional support and encouragement, financial support</td>
</tr>
<tr>
<td>Friend or Acquaintance</td>
<td>Information about programs, general encouragement in or guidance to go in a specific direction, share job openings and other information, put in a good word, ask their networks to consider applicant for interview</td>
</tr>
<tr>
<td>Community Leader</td>
<td>Connector for information and referrals, typically a bridge to network ties in positions of power</td>
</tr>
<tr>
<td>Community Institution</td>
<td>Space to make contacts with people you may not otherwise have in network, positive influence in life, support for work-life balance</td>
</tr>
<tr>
<td>Internet Resources</td>
<td>Self-directed research about jobs or organizations, social networking platforms to connect with personal and professional contacts, access to educational information including open source courses online</td>
</tr>
</tbody>
</table>
Employees seeking advancement need access to opportunities, but they also need exposure to different types of occupations, roles, and ways of looking at health care in order to figure out what direction they want to take with their career. For example, one nurse described how working on an interprofessional team with social workers led her to refine her own views and identify her interest in providing holistic patient care.

“They would put a nurse on the team and they would put these mental health workers on a team. Well it was fortunate because all the mental health workers at the time were very highly motivated and educated...I learned so much there. It was awesome...it solidified [the decision to become a MSW] for me because the social workers, the way that they worked, I admired that.”

This network resource—in the form of exposure to a new field and information about new ways to think about health—contributed to a pivotal, career-shaping moment for this employee. Although she remembers her team members as critical influences, they are likely unaware of the impact they had on her career. This additional invisible dimension of networks means that career-shaping relationships can be either formal and recognized, or informal and invisible. While very few professionals mentioned formal mentors, almost everyone identified a professor, supervisor, or other leader who had been a critical role model and that they looked up to and learned from, whether or not that person was aware of it.

Policy Challenge

Influential career-shaping moments sometimes occur accidentally or informally through interprofessional teams or interpersonal relationships. Creating more intentional types of interactions between employees—either in teams or in mentor/mentee relationships—will ensure that more people have access to critical network resources.

The Multidimensional Nature of Networks

Ties develop in complexity and provide reciprocal benefits over time

In New Hampshire, where networks within geographic regions and occupations tend to be relatively small and local, professionals described the importance of establishing and maintaining positive relationships. This is critical because it is very likely that they will stay connected to the same people in evolving ways over time. One respondent described how a co-worker became a friend and was also helpful as a professional reference.

“I’d say, you know, to my friend... ‘Can I put your name down as a reference because you worked with me for almost five years so you know how I work.’ Things like that. So, yeah, I would say friends, mutual co-workers are very important.”

Health professionals establish and navigate these complex relationships over the course of their careers. It is very common for personal ties to provide professional resources and for professional ties to become personal. One interviewee described a friend in a position of power who has been her colleague for many years. Now that they train and hire the next generation of health professionals, they act as resources for each other, exchanging information about potential job candidates.

“And she’ll have my clinical students and then she’ll recommend them for the residency program and then afterwards she’ll hire them. Or she’ll be a reference. And she’ll call me and she’ll say ‘You know I really liked him on the floor. How were they? Is it really somebody I should [hire]...?’ And I’ll go, ‘You have to.’ So we kind of go back and forth.”
Every health professional has a unique career network that they build and tap into at different times. Networks are always changing and they also differ among population groups - by class, race, and gender. Participant networks ranged from a minimum of 3 ties to a maximum of 11 ties, with an average network size of between 7 and 8 ties. This study suggests, however, that the quality of ties is even more important than the quantity of ties.

In other words, networks are only useful if people can activate them by translating resources into opportunity. For example, whereas a strong, supportive supervisor can encourage an employee, approve a flexible schedule so they can take classes, provide mentorship and information about opportunities, and connect them with resources, all which add up to an advancement-friendly environment, a less supportive supervisor can have the opposite effect.

These relationships vary widely, even in organizations that have clear policies in place to encourage advancement. Several respondents identified supervisors that negatively impacted their advancement opportunities, by being unsupportive of their success. One health professional watched her supervisor go back to school and obtain a Master’s degree with support from the organization. But when she approached her to discuss her own continuing educational goals, the supervisor did not offer her the same level of support.

“So I reported to this person...[she] was not supportive in [my] continuing after she went to get her Masters and was supported. She wouldn’t...didn’t want me to succeed. It was challenging.”

Another health professional accessed organizational resources, including a flexible schedule while attending school, but when it came time for her to move up into another position, her supervisor was not happy.

“I would say actually no [she wasn’t supportive]. If anything disgruntled that you left...‘I gave you this deal, now you’re going somewhere else.’ You know, that kind of thing. It’s tough you know. Especially like when you work in the same outfit, I mean you live paycheck to paycheck, it’s tough, you know.”

This lack of support meant that she felt pressure to stay in her low-paying job, even though she had the opportunity to move up. After making the decision to move on, she can no longer count her supervisor as a strong, positive network tie for future opportunities.

Health professionals can cultivate positive relationships and grow high quality networks. But there are also many situations that job seekers and employees find themselves in where these factors are beyond their control, such as being assigned to a supervisor like those described above. In these cases, specific network ties act as a disadvantage.

Policy Challenge

The quality of interpersonal relationships is often a key determining factor for advancement and in many cases this remains outside of the employee’s control. In work environments, transparent policies and practices for advancement as well as oversight in the distribution of resources can help to limit the unequal discretion of supervisors.
Individual Advantage and Hard Work

Network advantages are passed on in the course of everyday life and are often invisible

While some health professionals struggle to build quality networks or activate available resources, others access opportunities and advantages from their networks with little effort. Some respondents described networks as if they have always been there and have always provided opportunity. The nurse professor quoted on page 6 provided an example of this when she talked about referring students to her friends and said, “It’s not like we’re even calling.” Networking occurs constantly in overlapping personal and professional spaces while people move through their lives and careers. For example, one respondent had lived in New Hampshire her entire life and her network was extensive enough that she just happened to “bump into” someone she had worked with forty years prior who helped her get a job.

“Two of the ladies I worked with, I bumped into one of them last year and she said, ‘We need to get together.’ It had been forty years. So I had them both over here for lunch because I was out of work and going to school and one of them...said... you know, ‘My daughter is director of nurses over there.’ I’m like, “Really at ___ facility?” She goes, “Yeah.” I said, “I’m looking into that place.” She goes, “Well, let me tell [her],” and [the daughter] had me go in and made arrangements for my interview and I got hired.”

This effortless exchange in a personal space (the respondent’s home) resulting in professional advantage represents a common story - for those who have network ties in positions that can facilitate opportunity.

When reflecting on their degree of success in advancement, most professionals described their career paths as a series of rational decisions and trade-offs between life events, family responsibilities, personal skills and aspirations, and available opportunities. Only when prompted by the network questionnaire portion of the interview did people start to think about in more detail and discuss how they had accessed opportunities that they might not have otherwise had, through networks.

One interviewee pointed out that sending out resumes can be futile, and networking is the best way to get in the door. Although she did not know anyone in a position of power to provide her with direct job placement assistance, she realized that a friend had helped her by speaking to her boss and putting in a good word.

“... I’ve definitely found that [networking] that’s the best way, you know, the best way to go really ‘cause when you send out resumes...you know what, I’m thinking about my friend at the job at [name of organization]. Even though she didn’t tell me about the job, she did tell her boss, oh I know her, I went to school with her.”

For some, bringing to light examples of the advantages they had gained through networks was complicated and uncomfortable, and touched on some core beliefs about meritocracy and fairness. After answering questions about contacts that assisted them along the way, many respondents felt compelled to share stories showing that they had still succeeded primarily as a result of their own merit and hard work.

“We were brought up...[with the idea that] no one’s going to take care of you unless it’s yourself. You can’t count on anyone except for yourself and your family. And so that’s what I was brought up with. And always be kind, honest, and hardworking. It’s always been my model.”

In general, healthcare jobs are fast paced and require hard work and most interviewees had managed complex lives while moving through their career, so the fact that they had worked hard was not in question. Nevertheless, it was difficult for people to simultaneously acknowledge the fact that they had worked hard to get where they were, and had also benefitted from their networks. Respondents expressed conflicting ideas including a recognition that although they may have benefitted from networks in a specific way, and this is the best way to access opportunity, that not everyone can do this and they may have just been lucky or their situation unique.
“I think [I got in] because I knew quite a few people that worked where I wanted to go and that’s not always the case for a lot of people to get into a hospital or a really good place to work.”

“I think that’s [through networks] the only way you can really get a job and especially as you get older it’s even harder to get work. I’ve always been very lucky. I’m just a lucky person.”

Policy Challenge

Sending out resumes, for many job seekers, feels futile. Networks are one way for job seekers to get their foot in the door, but this advantage is only available to those who have contacts in different positions. Expanding networks while simultaneously creating more transparent hiring practices will open career pathways for those currently excluded from networks that provide opportunity.

Networks are a key facilitators of opportunity. Their level of effectiveness varies depending on the quality of relationships that health professionals have with key network ties. Some individuals and groups of people enter the labor market with strong networks that can link them to opportunity. Others must work to intentionally establish, build, and maintain these networks to produce the same level of opportunity. The next section describes how workers navigate their careers and leverage network resources within the current institutional environment. It presents a typology of current health career paths which vary by degree of advancement over time.
Health careers can be dynamic and fulfilling, yet findings from this study, Beyond Supply and Demand, indicate that our educational and employment systems are designed for a workforce of the past. For decades, hiring, retention, and advancement were largely driven through a narrow and direct line between job seekers, educators, and employers. Given an increase in the specialization of healthcare occupations in recent years, and the accompanying growth of education and training options for entry and mid-level health professionals, today’s health careers are more complex than in the past. Students and job seekers face a greater set of options for entering and advancing in the health field. Careers are now shaped by progressive and continuous development of skills, experience, and opportunity leading to more ongoing formal education and transitions between employers. This section demonstrates what health career paths look like today and explores the ways in which networks play an increasingly important role in mobility and opportunity, looking across health occupations and individuals for collective insights.

The study sample was designed for maximum range and diversity of perspectives by occupation, career stage, and racial and ethnic background, and does not represent the entire healthcare workforce. Nevertheless, clear patterns emerged that help us understand how health care workers are securing their jobs and advancing their careers, with implications for changes in policies and practices for education providers and employers. Health careers in Southern New Hampshire can be characterized by four main career path types: the linear, zig-zag, innovative, and lateral paths. The study also revealed two key subgroups: the old guard and the foreign trained health professionals. Figures 4 and 5 indicate the occupations held by respondents and the distribution of the sample by type of workplace.
Figure 4. Primary License, Certificate, or Degree Held by Respondents (n=50)

- RN, BSN, or APRN
- LICSW or MSW
- Interpreter
- Dental Assistant/Hygienist
- Direct Support
- Non-Clinical Degree

Figure 5. Respondents’ Primary Worksite (n=50)

- Hospital or Urgent Care
- CHC or Health Dept.
- Dental Clinic
- MHC or Counseling Center
- Social Service Agency
- Other
The linear path is often thought of as a “traditional” career path with seamless school to work transitions. Individuals on this path graduate from high school, choose a career, attend a 2- or 4-year college, and enter the workforce in a full-time job with benefits, staying in the field and advancing by going back to school to get a Bachelor's or Master's degree or accessing gradual professional development opportunities over time. Healthcare professionals on this path selected a clinical or non-clinical path in high school or early college, and through a combination of assets including high levels of support, financial resources, personal and/or professional networks, and/or part-time work on the side, persisted in college and attained good jobs. At the time of interview, they were either in full-time school while working on the side to gain experience, or working full-time as Registered Nurses, Dental Hygienists, or Clinical Managers and Administrators. This type is characterized by early success, consistent advancement, and few interruptions or deviations from the path. The key characteristic that defines this path is that it fits the institutional environment laid out for healthcare workforce development and produces health professionals that fit key health occupations.

“Yeah, I mean the days were awful when I was going to school...so basically what I was doing is three days a week I was working 16 hours...well interning for eight hours, working for eight hours and then going home, sleeping and then kind of doing the same thing the next day. Or if it was an off day I would only do eight hours but then I would have class sometimes.”

Others cited specific resources including leadership and scholarship programs or workforce development programs—accessed through networks—that provided them with sequential opportunities and enabled them to advance. Without the assistance provided through these resources, they believed they would not have been on a linear path. Another respondent recognized that she had been assisted on a linear path through network ties who helped her access good jobs immediately after completing school.

“My first position at [name of employer] would normally have never have happened for a new grad except for that I knew someone...and so that was, you know, my supervisor there at the time when I got hired...and the school nursing jobs that I took, again would have never been given to a new grad, but I knew the school nursing supervisor.”

Policy Challenge

Many educational institutions, workforce programs, and human resource departments design advancement programs and policies to fit a linear path, but few health professionals are on this path (see zig-zag path on the next page). Today’s programs need to be responsive to the characteristics of the current workforce, and build in processes that incorporate the understanding that career paths are increasingly shaped by network resources.
High School

In contrast to the linear path, the zig-zag path is by far the most common, and arguably the most typical of the emerging healthcare workforce. Interviewees on this path entered healthcare at different ages and at the time of the interview held concurrent healthcare jobs, often two or three different jobs at a time, including part-time, per diem, temporary jobs, and entry-level jobs with few opportunities for advancement. Some started out on the linear path but found it difficult to persist in full-time school while working and/or caring for family members. Others were unsure of what they wanted to do after high school, took some college courses or gained a professional license or health certificate but did not complete a degree, and held a wide range of jobs in and outside of the health field. This group had family or other responsibilities at different points in their life which took precedence over and shaped their careers.

Although a few respondents described making intentional decisions to “zig-zag” and try out different careers, most found themselves on this path unintentionally, despite working extremely hard. A common strategy used by this group to advance is to stay in the same occupation but move laterally into a “better” workplace setting, such as a hospital with a generous benefit package. Others have moved in and out of health careers while working in other fields, or are in health for now while pursuing another occupation. Nearly all aspire to secure regular, full-time, and stable work that pays a family-supporting wage. One respondent went from factory work to health, and is in the process of training for a career in Information Technology (IT). Although she found stability and benefits through her position in health care, the salary is too low to keep her in the field for the long term and she is seeking a better fit in IT.

“I’m doing medical assistant and I do IT and medical records preloading...when my [previous company] closed, I was looking for a job. First I wanted to be a nurse, but it was way too expensive. I have no money, so the only thing I could go for was the medical assistant’s job. So I ended up [going to school for that] and got the medical assistant job. [I was offered a high paying IT contract] for three to four months and I’m like no I’m permanent. I can’t do that...It’s the stability, yeah. The paycheck, the vacation that you have, the insurance because I need the insurance from my work.”

Others on the zig-zag path tried to advance in the health field and found it difficult because of a mismatch between their education or professional experience and various school requirements. One employee described the barriers she faced when she moved from another state and tried to matriculate at a New Hampshire university so she could finish her degree and advance in her career.

“There were just too many walls for...for people that are not cookie cutter freshman. I mean I really went back there as a second semester junior and they couldn’t figure out where to put me. Not all of it [transferred], I ended having to do some [of my courses] over again...”

Policy Challenge

Despite intentions and efforts to follow more of a linear path, many health professionals find themselves on a zig-zag path and in jobs that do not offer the requisite combination of regular schedules, full-time hours, stability, and/or a living wage. This can be addressed through workforce development strategies that assist employees to identify progressively better career options over time, combined with policies to ensure employees at all levels receive fair compensation and benefits that provide stability and a living wage.
Type 3: The Innovative Path
(12% of total sample)

Innovators typically begin their careers on the linear path described above, but after gaining a clinical degree or a Bachelor’s degree in a health or human service field, they deviate from this path. Innovators all described pivotal moments in their careers when they broke away from the mold and forged a new path. Usually this involved an informed decision to take a different job or pursue further education because of a desire to explore the more holistic aspects of health care. Highly educated, this is a small group of mid-career public health professionals, program managers, social workers, mental health professionals, and others who found that the best application of their skills and passions did not fit the options available for linear advancement in health care.

“I definitely don’t have a traditional pathway trajectory...it’s not this linear thing...There was part of me that almost like left nursing because I was so frustrated by you know, partly that piece in the community [not having advanced level jobs in community health settings], and partly not feeling like I was a good fit anymore because of my holistic sort of views.”

As a result of their decision to pursue less traditional careers, and despite having access to positive network ties and resources, some innovators described being underemployed and working in jobs that do not fully capture or compensate for the extent of their training and creativity. Others have been able to create or find positions that push the boundaries of the healthcare system and contribute in unique ways to the health of certain populations and the community as a whole.

“I’ve felt like as I grow in my leadership, there’s just not as many opportunities for me to be nurtured as a leader in those roles. Unfortunately I have looked, I have tried, in New Hampshire.”

Policy Challenge

Professionals on the innovative path are “out of the box” thinkers with potential to redefine the health system and contribute in important ways to improve population and community health. However, in New Hampshire they struggle to find mentors and settings in which they can develop and apply unique skills for the benefit of the health system. Programs and practices that facilitate mentoring, leadership development, and access to role models, and foster diverse and creative viewpoints on how to improve health, could fill this gap.
Type 4: The Lateral Path
(20% of total sample)

The lateral path is characterized by a lack of advancement, as defined by individuals on this path. Most people on this path have either held one entry-level type of job such as Direct Support Professional or LNA for an extended period of time, or a wide range of jobs in healthcare and other fields by moving laterally—to different workplace settings and different employers—without gaining additional education and training which effectively translates into middle or high skilled jobs over their career.

This group tends to have lower levels of education, including some high school, a GED or high school degree, some occupational training, or some college. Several respondents in this group had completed a healthcare training program but found it difficult to get their foot in the door at employers and were underemployed.

Some people in the lateral path have accessed good jobs in good settings at different times in their career, such as administrative positions, through personal contacts.

Many have made trade-offs due to ongoing family responsibilities. Some described a satisfying career in health care without professional advancement as a high priority or goal. However, most professionals on this path work constantly to pay the bills and have a strong desire to advance, yet have been unable to access a path that enables them to do so. Whether or not they have specific plans to advance, they all aspire to have their hard work recognized and valued and to earn a family-supporting wage.

“Right now I’m in school for administrative medical assistant...I don’t know if that is the route I want to go. I want to do LPN, I want to do RN, but with the kids I don’t want to fail. I think that the studies will be a little too much and I won’t be so focused. As you can see, my whole trail is, okay, I love school, but at the moment I need to pay my bills. So I’m more focused on how many hours that I can get...But, then you’re at the bottom of the totem pole so you’re working extra hard to make a little bit of money when you could go to school to make more.”

For people on the lateral path, a good supervisor can make the difference between staying and potentially advancing, or leaving. Even if they do not have the ability to change the pay structure, a supervisor can provide a supportive environment that contributes to retention and growth opportunities, strengthening the worker’s career over time.

“Yeah, they don’t want to pay good people so they lose good people. I mean, they lost so many girls since I’ve been there in five weeks. Really nice...very hard working girls. And I’ll say, ‘Why are you leaving?’ And they’re like, ‘I’ve had it. I’m done. I’m done here.’ Nobody appreciates you.”

Policy Challenge

Some of the most committed health workers may be stuck on a lateral path because they are working low-wage jobs and do not have the time and money to go back to school if classes are offered in ways that stick to the linear path. After reaching mid-career but staying on a lateral path, many hesitate to take a risk and invest in their own future because they see that this risk may not be rewarded in the form of a stable job with a living wage. Employers could build intentional strategies such as career goal discussions as part of annual reviews, and partner with workforce development programs to support and provide resources for employee advancement.
Sub-Group 1: The Old Guard
(18% of Sample)

One clear sub-group of health professionals that emerged from the analysis of career paths is a group of nurses, administrators, and other advanced professionals at the end of their careers. These professionals followed either the linear or innovative path, but this sub-group emerged as unique category because it represents a group of leaders who, regardless of their own decisions to either remain on a linear path or diverge into a more innovative role later in their career, feel that the same key steps and institutional resources that they accessed are still available and relevant for today’s younger emerging workforce.

These individuals selected their career at an early age, started out in the late 1970s or ‘80s, received training in universities and a range of clinical settings, and advanced into higher level clinical or administrative positions over time due to longevity in organizations or through the “small world” of networked contacts in Southern New Hampshire. These are today’s leaders in health care who hold positions of power, and the decision-makers who hire the next generation. Most professionals on this path have worked in the health sector as it has grown, and have rarely had a difficult time finding a job. The traditional path taken by the old guard is important to highlight because the ways in which they forged connections, and the institutional climate in which they experienced most of their career advancement, no longer exists.

“I can’t believe I’m saying this, but I feel old... I feel like the process is kind of cumbersome. Like you can apply online, but then you have to follow up to make sure they got it...Personally I like good, old fashioned paper, but that’s not the way it’s done nowadays. So it just seems like a lot of steps and following up to make sure things don’t get lost in cyber space, and...maybe I’m old fashioned, I don’t know...some of the formalities have gone away...Because I have interviewed a lot of people recently and you know people send you an email, like the follow up letter, when it used to be, no you send a hard [copy letter].”

Furthermore, the continued specialization of health careers and the introduction of new technologies including the transition to electronic medical records, means that new graduates are coming out of school with a different way of thinking about the health field. One nurse described how it is difficult to contribute ideas and forge connections with the old guard in this environment.

“Sometimes, you know, to be fresh from school and have maybe a different perspective on things, sometimes I think the older generation doesn’t necessarily want to hear it, especially if...and this is not just in nursing but if...if they’ve only done things one way and it’s always worked that way why change it...When really, you know, sometimes things need to be changed.”

The path taken by members of the old guard no longer exists, and new graduates are being trained for a healthcare field that requires different core skills and ways of operating on the job. Many successful health leaders cannot relate to the non-linear paths taken by early- and mid-career health professionals today and therefore find it difficult to act as mentors or advisors. Creative strategies for mentoring and succession planning are needed to bridge this gap to ensure that the emerging workforce can learn from the old guard and eventually advance into their jobs as they retire.

Policy Challenge

The type of career path an individual ends up on is determined by a complex set of factors including those most often discussed—level of education, family circumstances and responsibilities, individual motivation, and hard work—and those that lie just under the surface - networks and patterns that form part of our social environment. If people don’t have access to network ties that offer information and resources about how to navigate the linear system, they are unlikely to succeed. At the same time, employment institutions are realizing that the linear path is changing. So while some programs and policies aim to get more people on that path, other more innovative programs and policies are encouraging institutions to become more flexible and adapt to the workforce at hand. Meanwhile, job seekers today are also accessing new types of resources that complement but do not replace their experience in the education and employment world.
Sub-Group 2: Foreign-Trained Professionals

(18% of Sample)

The foreign-trained professional is specified as a sub-group because these interviewees shared a key characteristic: with some of the highest levels of education among the sample, they had trained abroad in health and other sectors before immigrating to New Hampshire, and had to re-invent themselves upon arrival. If they are successful in this process, they end up on the linear or innovator path, but many find it challenging and end up on a zig-zag or lateral path. This group by definition has completed a Bachelor’s degree or higher, yet many are working in some of the lowest level jobs in healthcare. Although language ability was a prohibiting factor for some at first, many came to the U.S. fluent in English and those that did not learned quickly. Most professionals found that they did not have the networks they needed to gain information or guidance to understand whether their professional degree or skills could be translated into a similar job in New Hampshire, so they started over.

“He [a friend] was trying to find me a job in the university actually but they say we don’t have any subject or something you can teach here because it’s very different.”

Many spoke about a critical window of time, shortly after arrival, when they would have invested time to recertify, or reeducate themselves, if they had known more or had felt it would pay off in New Hampshire.

“Sometimes you wonder, I wonder how my life would be if I had stayed. I was an RN...my biggest issue is I didn’t have anybody to…not knowing the system and nobody to look up to guide you. If they had said in two years you can have your RN, I would definitely [have] become a nurse in the United States.”

Others are actively seeking opportunities through more global networks that extend to other states in the U.S.

“Yeah actually I’m planning for that. I’m trying to make a contact with my friends. I have friends in Washington. I have friends in California and Indiana and Texas and I get sent my CV for them. And I told them if you can find me a job or things to be guaranteed that I can move there. They say okay.”

Policy Challenge

Immigrants trained abroad in health and other fields move to New Hampshire seeking opportunities to apply their advanced levels of education and skills. Many find the recertification or reeducation processes in health to be too confusing and cumbersome, or do not feel confident that re-investing in their career will pay off professionally. Strategies to connect new arrivals with network ties immediately upon arrival who can assist them in translating their educational and professional experiences into new careers would ensure that they can maximize their potential contributions to the field.

Policy-makers can focus on the unique challenges presented by each career path or sub-group in Southern New Hampshire’s health sector: from a lack of leadership, mentoring, and resources (innovators and foreign-trained professionals), to a lack of networks that lead to good jobs at the bottom as well as articulated advancement opportunities (zig-zag and laterals) to guide creative contributions to health care. These four categories are those least served by our current employment landscape, and they comprise 70% of the current workforce. The challenges encountered by workers in each of these categories need to be given priority when creating workforce and educational policies and programs for the future.
Implications for Workforce Diversity and Equity

One way of maximizing the workforce is to design policies that positively impact the career paths described above. Another is to prioritize population groups that are not advancing in the current workforce system with its underlying network patterns. This section introduces some implications of the previous network and career path findings for workforce diversity and equity. This is accomplished by comparing the experiences of non-Hispanic white health professionals who speak English as their native language, referred to from this point on as “white health professionals,” to those who self-identified as having racial, ethnic, or linguistic backgrounds that are non-white, Hispanic, and/or linguistically diverse, referred to from this point on as “diverse health professionals.”

Figure 7 indicates the racial and ethnic composition of New Hampshire, Manchester, Nashua, and Hillsborough County as a whole (which contains both Manchester and Nashua). Figure 8 indicates the racial and ethnic composition of this research sample.

Figure 6. Racial and Ethnic Characteristics of Population: New Hampshire, Hillsborough, Manchester, and Nashua

<table>
<thead>
<tr>
<th>Total Population</th>
<th>New Hampshire</th>
<th>Hillsborough County</th>
<th>Manchester</th>
<th>Nashua</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,319,171</td>
<td>402,017</td>
<td>109,942</td>
<td>86,766</td>
</tr>
<tr>
<td>RACE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>94.0%</td>
<td>90.9%</td>
<td>86.3%</td>
<td>85.5%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1.2%</td>
<td>2.2%</td>
<td>4.7%</td>
<td>2.2%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.2%</td>
<td>3.4%</td>
<td>4.4%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
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<td>0.0%</td>
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<td>0.0%</td>
</tr>
<tr>
<td>Some other Race</td>
<td>0.7%</td>
<td>1.3%</td>
<td>2.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>1.7%</td>
<td>1.9%</td>
<td>2.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>ETHNICITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino (of any race)</td>
<td>2.9%</td>
<td>5.5%</td>
<td>7.9%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>97.1%</td>
<td>94.5%</td>
<td>92.1%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Total Racial and Ethnic Minority Population (rounded)</td>
<td>8%</td>
<td>13%</td>
<td>18%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: American Community Survey 2009-2015
As this report has shown, health professionals leverage resources through networks that are often provided through formal institutional ties or roles. Further analysis reveals that networks operate differently for diverse and white employees, and that diverse health professionals are more likely to be found on the zig-zag and lateral paths where they face challenges with advancement.

In an equitable labor market that maximizes the potential of all workers, we would expect the proportion of diverse workers in different workplace settings to roughly mirror the proportion of diverse workers in the labor force as a whole. However, as illustrated in Figure 5, diverse health professionals are overrepresented in Southern New Hampshire’s nursing and residential care workforce (13%) and underrepresented in the hospital workforce (6.5%) compared to their participation in the labor force (9.5%).

This means that a diverse workforce is more commonly found in settings that pay less and offer fewer advancement opportunities. There are many factors that drive these patterns, including employment discrimination. However, this study suggests a more subtle form of racial inequality at work. When people pass opportunities to their contacts, and institutions reinforce these patterns, networks may unintentionally play a role in creating and perpetuating these inequalities. The good news is that networks can also play a role in reversing them.

Figure 7. Racial and Ethnic Characteristics of Diverse Respondents in Sample (n=25)

Figure 8. Distribution of Racially and Ethnically Diverse Healthcare Professionals by Type of Workplace: Hillsborough County

Source: Quarterly Workforce Indicators (Average of Quarters 1-4 2012). Local Employment Dynamics Database. U.S. Census Bureau
Diverse professionals are more likely to be on the zig-zag and lateral paths

In this study with a sample that is 50% white and 50% non-white, workers of color were underrepresented in the linear and innovator paths (26% and 0%), and overrepresented in the lateral and zig-zag paths (80% and 68%). This is consistent with national research that has documented patterns of occupational segregation in health care, including an overrepresentation of diverse workers in health occupations and settings at the lowest wage and skill levels that offer few opportunities for advancement.

Understanding how career path opportunities vary by race and ethnicity is a critical step to ensure that policy solutions for workforce development do not reproduce patterns of racial inequality in Southern New Hampshire's health care labor market. In addition, networks offer a potential mechanism for transmitting new patterns and opening up career paths that historically and in recent generations were closed to diverse populations.

Networks reinforce occupational segregation

Studies in other parts of the United States have found that networks can lead to and reinforce occupational segregation because people tend to move in circles and pass opportunities to people that are like them. These patterns are cemented by institutional arrangements and historical trends that give whites advantages in multiple areas of life such as the housing market, funding for public schools which is tied to local taxes, and inheritance laws which permit the transfers of intergenerational wealth. Advantages in different areas of life reinforce each other and accrue over time. Understanding network advantage is one way of learning how these advantages are passed on.

The study provided some evidence that white health professionals and those who have lived in the state for generations, on average, have racially and ethnically homogenous networks. In other words, they are more likely to be embedded in networks and settings with other whites and individuals in positions of power that provide access to the positive resources and connections they need to advance. For example, many white workers have personal networks that include a member of the predominantly white old guard who thought of them when an opportunity arose. In contrast, diverse professionals are more likely to have racially and ethnically diverse networks - to move in circles and have personal and professional network ties that are both white and non-white. Many do not have personal access to people in positions of power and rely entirely on formal roles and connections forged within the education and workforce system to obtain jobs and advance. Strategies to grow diverse leaders will ensure that, over time, health professionals in positions of power will be diverse, and therefore all workers will have opportunities to interact with leaders who are different from them across a range of professional and personal settings.
Opportunity passing depends on network quality, not quantity

As described previously, network advantages do not only come about through actively requesting favors. To some extent, professionals intentionally develop networks over time to assist them professionally. But this study has shown that the passing of opportunities often just “happens” as people move through their lives. Job seekers are therefore dependent on their contacts’ thinking of them first if an opportunity arises. The ability to tap into resources for professional gain lies in the quality of relationships and networks, which depends on personal history, interpersonal exchanges, and the institutional environments in which ties are formed and sustained.

Many diverse respondents described a subtle experience of isolation, or not being recognized or known for who they were, at different points in their careers, which impacted their ability to maximize relationships, establish quality ties, and actualize their potential in their jobs and workplaces.

“Being a minority you are careful. You’re afraid to say things or to act out of the ordinary…you try to become part of the environment you’re at. I would say a little bit invisible because you don’t talk about your culture or your values because if you do talk about them you’ll be different.”

“Even going to get a job sometimes…they see my name and automatically think I don’t speak English, I don’t know anything and I’m stupid. When I get things—even from work—they will send me things and they will send it to me in English and they will send it to me in Spanish. I went to them and I’m like, “Don’t send me [this stuff] in Spanish because I don’t read in Spanish.”

On average, all respondents had a similar number of personal and professional network ties. But diverse professionals described having to be more discerning in professional settings to find positive connections to leverage, which means that although they ended up with a similar number of network ties, they did not have the same pool of positive contacts to draw from to develop those ties. They more often described engaging in active work to establish and activate networks for support and advancement. They also described having contacts, but not always thinking of asking them for assistance. Because of the quality of their relationships, they were not as confident activating network resources and translating them into opportunity.

“Well, I did know – I mean I knew people who worked there, but I wasn’t friends with them or whatever. You know like when you know somebody you went to high school with and they just happen to work for the same company? Yeah, I went to high school with her… actually one girl I know that works there, I’ve known her since kindergarten. When I found out she was working there – we actually bumped into each other and I’m like, “Well fancy meeting you here.” She was like, “If you had told me you needed a job I would have got you a job.” I’m like, “Oh!” I hadn’t spoken to her in years. You don’t think to ask people for things like, “Hey by the way, hook me up with a job.” I didn’t think of that.”

Institutions can reinforce or shift patterns of advantage

Health professionals on a linear path benefit from the way our current educational and employment institutions are set up. Few people succeed on this career path without accessing additional advantages through their networks. Since the diverse workforce is less likely to be found on the linear path, creating more policies that strengthen this path may unintentionally give advantages to white professionals. Furthermore, as we have seen, relationships that form the basis of network patterns of advantage are often forged in professional settings such as schools and workplaces. Educational institutions, employers, and workforce development programs have a key role to play in developing leaders and creating settings that encourage the development of positive career networks that transmit opportunity to all, allowing professionals from all backgrounds to thrive. Policy-makers can focus on bringing this knowledge to the forefront, changing patterns that result in unequal advantages, and bolstering institutional support for the invisible and additional work of network building and maintenance.

“The environment that [nurses] they’re in is really important because it’s going to nurture either the negative or the positive behaviors…here for the most part, the positive behaviors are nurtured really well. But if you’re in an environment that’s toxic in some way, or that the leaders don’t allow for autonomy, that don’t value professional development, then the negative behaviors are going to…flourish.”
Leaders from workforce development, higher education, health, and community sectors intent on designing an inclusive workforce system face key challenges because the system is still primarily designed for a linear employment landscape of the past. Although those on the linear path who fit the mold are able to move through our existing workforce system and access opportunities for advancement along the way, others—the growing majority of our workforce—face structural challenges which prevents them from maximizing their potential.

In designing educational, workforce, and employment policies, it is no longer appropriate to say that today’s aspiring professionals don’t fit the mold. Instead, we must recognize that the mold no longer fits the workforce. The small group of linear professionals who succeed in our existing system are likely to continue to succeed into the future. Universal policies and programs that benefit all workers can simultaneously be designed with workforce diversity and equity in mind. This requires additional thinking about the impact of these policies on groups who may not benefit from the system the way it is currently set up, and who may enter into their careers with network disadvantages. Policy recommendations specific to Southern New Hampshire’s health sector include:

**Educational Institutions:**
- Provide matriculation and course options that allow working professionals on a zig-zag path to obtain additional education and training including degrees, licenses, certificates, and professional development opportunities.
- Expand resources and support for transferring credits or licenses from other parts of the U.S. and from abroad for foreign-trained health professionals and health professionals trained in other states.
- Include professional development or human resource ethics modules on network roles, functions, and professional responsibilities for professors to examine their conscious and unconscious practices and patterns.
- Integrate network concepts into ongoing cultural competency trainings and institutional initiatives focused on inclusive excellence.
Workforce Development Programs:

- Augment sector-specific or occupational-specific initiatives with concrete information about and introductions to organizations, associations, and leaders in the field.
- Develop formal mentoring relationships for students with health care professionals during the training period to improve post-completion network and mentoring support.
- Don’t rely only on job developers at the end of the program for placement support; build job seeking and advancement planning strategies into programs from the beginning.
- Design a resource program to target the unique needs of foreign-trained professionals with a goal to provide support and accreditation options to immigrants shortly after arrival in the U.S.
- Educate job seekers on the role and power and process of networks, and guide students while in programs about ways to build new networks.
- Encourage peer support models that provide a positive environment and promote collaborative team advancement models instead of competition.
- Improve use of program alumni to talk about their jobs while training is taking place as a way to help build networks.
- Be aware of cultural differences in how networks are made and leveraged within different populations to ensure advice and support are equitable and culturally informed.

Employers:

- Include professional development or human resource ethics modules on network roles, functions, and professional responsibilities for supervisors and all staff to examine their conscious and unconscious practices and patterns.
- Integrate network concepts into ongoing cultural competency trainings and equal employment opportunity initiatives.
- Provide structured career development opportunities for health professionals including mentoring which helps people to expand their network ties within and outside of the workplace.
- Develop and publicize policies and procedures related to employment advancement to encourage transparency in managers and all staff.
- Include information about career advancement opportunities and steps in all annual reviews. Create a form for all pathways and make sure this is reviewed annually by managers for a plan if employee wishes.
**Healthcare Professions:**

- Intentionally develop and activate network ties throughout the career for self and peers, including accessing professional opportunities for others through personal networks.
- Collaborate with peers and openly discuss how to best exchange information and share resources to expand opportunities for each other over time.
- Reflect on personal and professional opportunities that have facilitated success, and while advancing, strategize how to become a network connector for others in similar or new ways.
- Ask educational institutions and employers to share policies and procedures related to advancement to encourage transparency.

**Healthcare Leaders, Professors, and Supervisors:**

- Design courses and career opportunities to fit with today’s career paths instead of more traditional paths.
- Reflect on personal and professional opportunities that facilitated success, and discuss networks in formal and informal ways with students, staff, and peers.
- Strategize with peers—other leaders in the field—about how to expand resources and become a network connector for all people rather than those with the strongest ties.
- Assume responsibility for being a role model, and maintain transparency and professional standards while passing opportunities in personal and professional spaces.

**Professional Associations:**

- Provide forums for professionals to come together for professional development and networking.
- Establish guidelines or recommendations regarding transparency in advancement procedures.
- Develop and share career ladders and lattices for advancement.

**Public Policy:**

- Incentivize programs and institutions that build strong ties to employers in the field and succeed in placing students on long-term career pathways rather than just into jobs.
- Commit resources to developing cross-institutional collaborations and resources that enable professionals to develop and advance.
Innovative policymaking requires taking a fresh look at the factors that shape health careers. This report offers several key findings:

- In addition to gaining professional skills and accessing institutional resources, health professionals advance through networks, which are key mediators of opportunity.

- New Hampshire’s workforce system is designed to support a linear career path model, but the majority of our workforce is on a “zig-zag” path to success, creating a mismatch in opportunities for supporting career advancement.

- Interpersonal and institutional network patterns can create barriers to advancement in a range of career settings, reproducing inequalities and impacting the diverse workforce.

- Policy-makers can leveraging the power of networks to enhance opportunity and open career pathways for health professionals of all backgrounds.

Rather than trying to squeeze the current workforce into a mold or onto a path that no longer fits, it is time to bend the mold and identify new and innovative ways to support today's healthcare workers and design solutions for today’s career paths. This study describes how networks contribute to the development of career paths, augmenting existing policy logic, which is based on the understanding that incremental advances in education and training combined with work-life supports and strong educational and workforce institutions can move people forward in their careers. It also observes that the diverse workforce is disproportionately missing from mid-level jobs in healthcare and from workplace settings that provide opportunity for security and advancement, and networks appear to contribute to this disparity.

While future research should focus on establishing even clearer causal links between networks and racial inequality, the results of this study provide sufficient information to contribute to new policies and practices that expand opportunity and ensure equity. Education and employment programs and practices that respond to the changing landscape can bring network patterns to the surface and support the development of strong career paths for a stable workforce, maximizing potential in health careers.
End Notes


3. Findings are based on an analysis of fifty network questionnaires measuring identification, roles, and strength of ties that were administered orally during qualitative interviews.


7. This typology is based on the qualitative analysis of fifty career histories interviewed for this study, following a methodology similar to: Kluge, Susann (2000). Empirically Grounded Construction of Types and Typologies in Qualitative Social Research [14 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 1(1), Art. 14, http://nbn-resolving.de/urn:nbn:de:0114-fqs0001145.


9. Statistics for chi2 analysis include: linear ($x^2=4.67$, df=1, $p\leq0.05$); innovator ($x^2=6.82$, df=1, $p\leq0.001$); lateral ($x^2=4.5$, df=1, $p\leq0.05$); zig zag ($x^2=4.16$, df=1, $p\leq0.05$).


