



Profiting from Health Care

The Role of For-Profit Schools in Training the Health Care Workforce

Julie Margetta Morgan and Ellen-Marie Whelan January 2011



Center for American Progress



Profiting from Health Care

The Role of For-Profit Schools in Training the
Health Care Workforce

Julie Margetta Morgan and Ellen-Marie Whelan January 2011

Contents

- 1 Introduction and summary**
- 5 For-profit education**
- 8 Who makes up the health care workforce?**
- 11 The future of the health care workforce**
- 13 Health care educational programs at for-profit institutions**
- 23 Measures of educational program value:
A combination of price, quality, and expected returns**
- 36 Conclusions and recommendations**
- 45 Appendix**
- 47 Endnotes**
- 48 About the authors and acknowledgments**

Introduction and summary

Jobs, jobs, jobs. The nation's unemployment rate seems unable to move far from the 10 percent mark and many are asking where the jobs will be in the next decade. The answer seems to be in health care. The Bureau of Labor Statistics, or BLS, predicts that 3.2 million new jobs will be created in the health care sector between 2008 and 2018.¹ These include high-skill, high-paying jobs like doctors and nurses as well as many more low-skill, low-wage jobs.

It's important to note, though, that these predictions were made prior to the passage of the Patient Protection and Affordable Care Act. More health care workers may be needed as a result of the new health reform law, which will provide coverage for an additional 32 million Americans by 2014.

Meeting this future need will not be easy given that we have a current shortage in many health professions. There were provisions to expand the health workforce in both the American Recovery and Reinvestment Act and the Affordable Care Act. But concern remains about the country's capacity to create enough health providers. Colleges and universities have been and will be key players in meeting the needs in the health care professions.

One emerging player in the field of educating the health workforce is the for-profit college. These institutions warrant serious consideration as part of efforts to meet the needs of the health care professions. They offer both online and in-person educational programs in a variety of health fields and they have a capacity for rapid expansion and a pattern of recruiting underserved populations of students.

For-profit colleges came under scrutiny from the press, student advocacy groups, and the federal government in the past year for their steep enrollment growth, high profit margins, and dependence on federal dollars. Reports reveal extraordinary enrollment rates contrasted with low graduation rates and high student loan defaults. This is a significant issue for the individual students who carry high debt burdens without the benefit of a college degree as well as for the federal govern-

ment, who provides the grants and loans that make up 90 percent of these companies' revenues in some cases.² Additionally, when the Government Accountability Office looked at for-profit schools and their reliance on federal student aid, they found schools that specialized in "health care" tended to have their students rely more heavily on student aid.³

The debate over the future of for-profit colleges is high stakes. These institutions stand to lose out on billions of dollars if proposed regulations go into place to limit enrollment growth and access to federal aid for programs whose students have high debt loads compared to their salaries. For-profit schools also are a point of access to higher education for low-income and minority students and a potential source of much-needed health care workers. It's extremely important to get the details right.

Getting the details right means finding out whether for-profit colleges are making a contribution to the health care workforce and what that contribution looks like. It also means ensuring that students receive quality educational opportunities at a reasonable price.

Thus far, it has been difficult to wade through the speculations and anecdotal evidence. The for-profit colleges assert that they are playing a significant role in the production of the nation's health workforce. In fact, in one of its recent advertisements, the Association of Private Sector Colleges and Universities claims that "now is no time to get in the way" of their progress because health care providers turn to for-profit schools for highly qualified nurses, medical assistants, and technicians.

But we do not really know much about the role these schools play in the education of health professionals. The "health workforce" is comprised of hundreds of different occupations ranging in educational preparation from "on-the-job" training to postdoctoral education. These individual occupations have a dizzying array of titles and duties, and most analyses of the "health workforce" either focus on individual professions or speak broadly about all health professions, glossing over the details. To really evaluate the role of for-profit colleges, the discussion must move beyond sweeping terms like "allied health," "health professions," and "health workforce" to specific occupations and educational programs.

This report intends to bring some clarity to how the for-profit education sector is contributing to the health workforce. It begins by providing a brief overview of these "proprietary" or for-profit schools and highlights the most pressing needs

in health care occupations and the educational requirements for these professions. It takes an in-depth look at the progress for-profit colleges are making at educating students in health care programs. It also provides a detailed discussion of the resources available to students to help them understand the price of health care education programs, their likely salary upon graduation, and the overall quality of the educational offerings at a particular institution—the key pieces of information necessary for students to decide whether an educational program is worth the price.

The report finds that for-profit colleges are graduating students in health care fields but generally not the fields at the top of the nation’s growing health care needs. For-profit schools are making a contribution to the health care workforce but much of that contribution is concentrated in one educational program: medical assisting. The second-largest educational program in health care at for-profit schools is massage therapy, which does not correspond to any significant workforce need. For-profit colleges make a modest contribution in other areas such as registered nursing and licensed practical nursing. Clearly, traditional not-for-profit colleges are doing the bulk of the work in addressing our projected health care workforce needs.

We found that a whopping 78 percent of all health care credentials awarded at for-profit institutions in the 2008-09 school year were certificates or degrees at the associate’s level or below.⁴ For-profit colleges tend to focus on health care “support” occupations like medical assisting, massage therapy, and dental assisting rather than “practitioner” or “technical” health occupations like registered nursing, medicine, or diagnostic technologist fields. Though health care support occupations are growing, the field is less than half the size of the health care practitioner and technician group. And health care support jobs tend to be lower paying than practitioner positions.

In this report we also compare tuition costs at for-profit schools with their more traditional not-for-profit counterparts, look at the salaries that students graduating from for-profit schools might make working in the health sector, and examine a myriad of quality measures that might be used to evaluate a health education program. As for-profit colleges continue to expand in this area, it is important to strengthen indicators of quality and value to protect consumers from fraudulent programs and help students choose the best program that suits their needs.

The report makes three main observations about for-profit colleges and the health care workforce:

- For-profit schools are making only modest contributions to training the highest-demand health professionals. This is partly due to the very nature of the type of programs for-profit schools currently offer.
- For-profit institutions are training health care workers who may have a hard time finding a job or will only find work in jobs at the lower end of the pay scale.
- Quality measures now in place make it nearly impossible for students to traverse the maze of health professional education programs to make informed decisions.

We address these problems through the following three recommendations:

- Incentivize schools to offer and students to choose health career programs in fields that meet the nation's future health care workforce needs.
- Help students choose the best course of health care study that will pay them a good wage.
- Improve quality measures to help students make better and more informed decisions.

We should be maximizing all available resources as we work to get more students into college and more workers into jobs. For-profit colleges are part of the arsenal of resources to meet the growing demand in health care fields. We can begin to think about how to maximize their impact while minimizing any negative impact on students by shedding light on how they operate in the health care sphere.

For-profit education

The category of postsecondary institutions commonly referred to as “for-profit,” “proprietary,” or “private-sector” colleges are privately owned providers of education that are profit seeking. These are distinct from the colleges that are typically referred to as “private.” Private colleges and universities are not-for-profit organizations such as Georgetown University or Roger Williams University. And all the public universities—such as the University of California system—and other state universities are also not for profit.

For-profit colleges take many forms. They range from small career schools that teach cosmetology, HVAC repair, and culinary arts to giant, publicly traded companies such as the University of Phoenix that provide programs from the certificate to the doctoral level in a wide variety of areas. These large companies have been able to grow and expand significantly over the past 20 years through online educational programs. Now, institutions such as Kaplan University have more than 60,000 undergraduate students attending college online. University of Phoenix’s have more than 300,000.⁵

Although for-profit colleges operate at all levels of postsecondary education they mostly provide associate’s degrees and certificates that require less than two years of training. In fact, in 2008-09, 78 percent of all health care credentials awarded at for-profit institutions were certificates or degrees below the baccalaureate level.

For-profit colleges are most often compared to community colleges due to this concentration on certificates and associate’s degrees. While community colleges are the most analogous type of not-for-profit college in terms of the population they serve and the degrees they produce, the missions and business models of these institutions create some important differences. Whereas community colleges are heavily subsidized by states and tend to charge very low tuition, for-profit colleges do not receive direct government subsidies and charge fairly high tuition rates.

For-profit colleges tend to serve the lower-income population but they maintain high tuition rates by relying on federal student financial assistance. A large proportion of the students at these institutions receive Pell Grants and they often finance their tuition bills with student loans. For-profit colleges received more than \$4 billion in Pell Grants and more than \$20 billion in student loans in 2009.⁶ For-profit college students account for only a small percentage of U.S. college students (between 10 percent and 12 percent) but they receive 23 percent of all federal student loans and grants.⁷ At some for-profit institutions a shocking 90 percent of their revenue comes from federal grants and loans.

Investigations into the for-profit college industry raise questions about the value of this federal investment. These institutions have profit margins as high as 30 percent but as many as 50 percent of their students do not graduate. Though their graduation rates are as good or better than similar not-for-profit institutions including community colleges, it is the combination of high federal investment, high cost to individual students, low graduation rates, and remarkable profit making that seems to rankle policymakers and student advocates.

The Department of Education is finalizing a regulation called “gainful employment” that would address both the individual and governmental investment in for-profit education. The gainful employment rule would disqualify programs from receiving federal student financial assistance such as Pell Grants or student loans if program graduates fail to meet a set debt-to-income ratio or rate of repayment on their student loans. The idea behind the rule is that students who graduate from career education programs should be employed and able to pay the debt they take on to finance their educational programs.

The gainful employment rule is essentially a consumer protection measure. It would cut off access to federal student financial aid for educational programs that are too expensive or of too low quality to provide students with the chance to earn a living while also paying back their student loans. This measure could significantly change the way for-profit colleges operate and even bring some of their programs to a close.

This rule would likely protect the federal investment in student financial aid, which is an important national goal. But it could be at odds with meeting the needs of the health care workforce if it impedes for-profit colleges’ ability to provide health-related educational programs. The rule also would likely cut out some poor-quality programs but there will still be significant variations in quality.

Students and policymakers need to know which programs provide a high-quality service and which do not.

All of this gives us reason to further examine the role of for-profit colleges in the future of higher education. These institutions claim to play a role in educating the future health care workforce. This report investigates what kinds of health care workers these schools are educating and whether these are the kinds of workers we will need in the coming years.

Who makes up the health care workforce?

When we think of who makes up the health workforce, doctors, nurses, and dentists initially come to mind. And as individual providers they do make up the bulk of the health workforce. The field is vast, however, and training and projected needs are wildly different. (For a detailed description of these occupations, see Appendix.)

One helpful way to think about the health workforce is to describe them as the U.S. Department of Labor’s Bureau of Labor Statistics does: as “professional” occupations and “support” occupations.

The first category of professional occupations includes health care practitioners and technicians. These workers are involved with the diagnosis and treatment of patients, such as doctors, registered nurses, dentists, or physical therapists, and technology-related professions. This category further includes those who operate medical equipment or assist in diagnosing and treating patients, such as dental hygienists, radiologic technologists, and licensed practical nurses.

Health care support occupations include those who work under the supervision of health care practitioners to provide routine care or more administrative support. This category includes medical assistants, nursing aides, dental assistants, and home health aides, to name a few.

This distinction has important implications in terms of education. The health care practitioners and technicians categories are comprised of occupations that tend to require significant postsecondary training. In fact, 95 percent of the occupations in that category will require at least some college education by 2018, and 63 percent will require a bachelor’s degree or above.⁸ In contrast, health support workers require significantly less postsecondary education. More than 40 percent of the health care support jobs of the future need no postsecondary training at all. The jobs that do require college education will need an associate’s degree or less (such as a certificate or a few college classes but no degree).

Registered nurses, or RNs, make up the largest segment of the health care workforce at just more than 3 million.⁹ Educational preparation for these nurses is fairly unique in that there are three ways to become an RN.¹⁰ The earliest schools of nursing offered a diploma in nursing and not an actual academic degree. These programs are diminishing rapidly though there are still a few of them in the country. About 40 years ago programs began to be offered at both community colleges, where an associate's degree was awarded, and at universities, which granted the bachelor of science in nursing degrees.

These various pathways are confusing but they offer numerous opportunities to train to become an RN. Although most registered nurses are still trained in associate's degree programs, there is an increasing trend to emphasize the importance of baccalaureate-level training in registered nursing.¹¹

The licensed practical or vocational nurse, or LPN/LVN, is a related profession. Though both registered nurses and LPNs—and sometimes even certified nursing assistants—can be called colloquially “nurses,” there are important differences in their training and job duties. LPN students receive a diploma after completing a 12-month program and must pass a standardized state licensing exam. LPNs/LVNs play an especially important role providing care in nursing homes and other long-term care facilities. According to BLS, there were 700,000 employed LPNs last year. Many of these professionals continue their education to become RNs. Currently about 18 percent of RNs were once licensed as an LPN or LVN.¹²

One of the fastest-growing professions in the health care workforce is the home health aide. Home health aides provide basic care to patients and the elderly within their own homes. These individuals are extremely important to the health care workforce but they do not feature prominently in this report because no formal postsecondary education is necessary for this occupation. Those who work in a health facility that receives Medicare or Medicaid reimbursement, however, must complete a training program of 75 hours and pass a competency evaluation.

Medical assistants are also a component of the health care workforce. They were originally trained on the job but there is now more formal preparation usually in a community or junior college or in a vocational tech program. Where they work upon graduation is also quite varied and it is usually a mix of administrative and clinical work.¹³ Medical assistants are typically employed in doctor's offices or in the outpatient sector. This is in comparison to another allied health professional: the nurse's aide or orderly. These workers tend to be found more in hospital settings and they have more of a clinical, patient care function.

Often, the large subset of health workers who make the health care system function—besides doctors or nurses—are called “allied health professionals.” They make up 60 percent of the total health workforce.¹⁴ According to some sources there are more than 80 different health professions that could be considered “allied health.”¹⁵ These include medical assistants, dental hygienists and assistants, dietitians, medical technologists, occupational therapists, physical therapists, radiographers, respiratory therapists, and speech language pathologists. The training of these professionals is quite diverse, ranging from a home care worker who can receive on-the-job training to much more formal degree-granting programs.

The allied health category is sort of a grab bag of health-related workers. And unfortunately it is too often used as an easy way to group all these professions into a single workable data cluster. But given the various roles these occupations play and their educational requirements, we need to move beyond the “allied health” terminology to the specific occupations it includes when analyzing the needs of the workforce and the role of postsecondary institutions.

The future of the health care workforce

The health care landscape will look very different in the next decade. First, our aging population will likely have a host of additional health conditions that accompany old age—and in record amounts. The oldest baby boomers turned 65 on January 1, 2011. Every day for the next 19 years about 10,000 more will become Medicaid eligible.¹⁶

Second, the passage of the Patient Protection and Affordable Care Act will likely have a large effect on the nation's health workforce needs. Most significantly, more people will have access to quality health services. As a result of the Affordable Care Act, more than 30 million more Americans will have health insurance coverage by 2014. These newly covered patients will likely receive more and different health care in a reformed health system.

These factors will affect future demands of the health care workforce but this also builds on a shortage of many different health care workers. There is strong demand for health care jobs that is fueled by technological and medical advances. Even in the recession health care employment has increased by 650,000 jobs.¹⁷ Ironically the bad economy has helped with the nursing shortage by causing many older nurses to migrate back into the workforce. But this is expected to be short lived with a projected need for more than 1 million nurses by 2018 due to new job openings and replacements.¹⁸ There are also shortages of physicians but debate over whether there are not enough overall or just in geographic pockets (such as urban inner cities and rural areas) and in certain specialties (such as primary care).¹⁹

It is important to point out that employment in health care fields is dominated by positions requiring postsecondary degrees. Anthony Carnevale, in a report titled “Help Wanted,” projects that by 2018 there will be 2.8 million job openings in health care professional and technical occupations. Nearly two-thirds of jobs in these occupations will require a bachelor's degree or higher.²⁰ Of the job opportunities, 192,000 will require some college but no degree, 681,000 will require an associate's degree, 921,000 will require a bachelor's degree, and 840,000 will require a graduate degree of some kind.

BLS projections break down the specific health care occupations that will see most of the growth. Registered nurses will have the largest change in job openings, with 1,039,000 openings between 2008 and 2018. The second-largest growth in job openings will be home health aides with 552,700. These are followed by nursing aides, orderlies, and attendants (422,300); and licensed practical and licensed vocational nurses (391,300).

TABLE 1

The next decade will see a huge demand for registered nurses and other health care workers

Top 15 health care occupations with the greatest change in job openings, 2008–2018

| Top 15 health care occupations with the greatest change in job openings, 2008–2018 | Percent change (over 10 years) | Number of people needed to fill jobs |
|--|--------------------------------|--------------------------------------|
| 1. Registered nurses | 22.20 | 1,039,000 |
| 2. Home health aides | 50.01 | 552,700 |
| 3. Nursing aides, orderlies, and attendants | 18.78 | 422,300 |
| 4. Licensed practical and licensed vocational nurses | 20.65 | 391,300 |
| 5. Physicians and surgeons | 21.79 | 260,500 |
| 6. Medical assistants | 33.90 | 217,800 |
| 7. Medical secretaries | 26.64 | 189,000 |
| 8. Pharmacy technicians | 30.57 | 182,000 |
| 9. Dental assistants | 35.75 | 161,000 |
| 10. Pharmacists | 17.01 | 105,800 |
| 11. Medical and health services managers | 16.01 | 99,400 |
| 12. Dental hygienists | 36.14 | 98,400 |
| 13. Physical therapists | 30.27 | 78,600 |
| 14. Medical records and health information technicians | 20.33 | 70,300 |
| 15. Radiologic technologists and technicians | 17.23 | 68,000 |

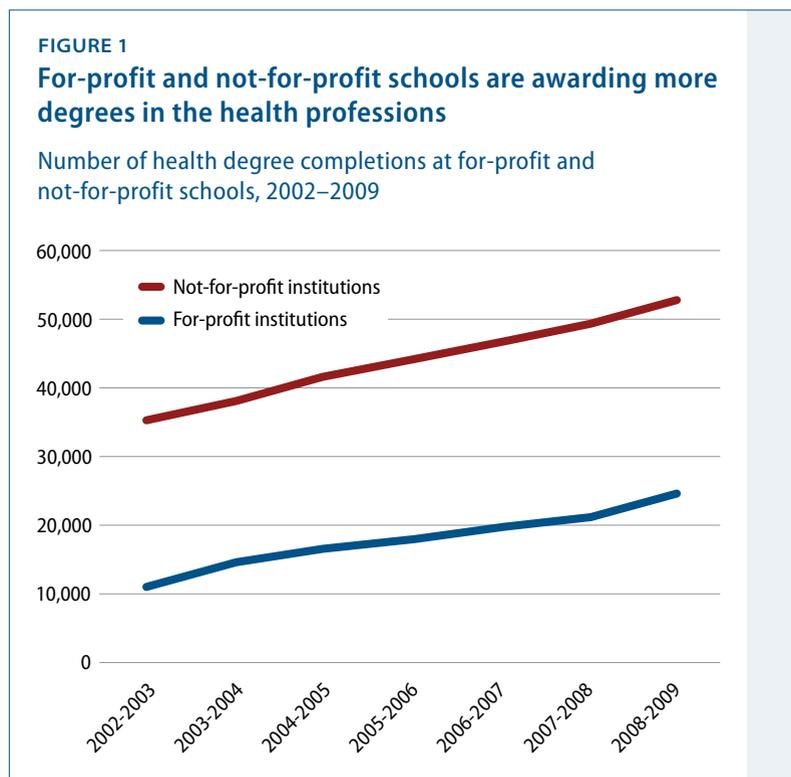
Source: Bureau of Labor Statistics, Employment Projections by Occupation, 2008-2018.

Health care educational programs at for-profit institutions

The available data on health care educational programs can shed some light on how for-profit colleges contribute to the health care workforce needs outlined above. The Department of Education classifies all health care programs together in its Classification of Instructional Programs. Through the Integrated Postsecondary Education Data System, or IPEDS, we can see how many degrees were completed in a given year under this large “health professions” umbrella, as well as in the individual programs that fall into that category.

For-profit institutions produced 247,480 degrees and certificates in educational programs in the health professions in the 2008-09 school year. Figure 1 shows that this number has been growing over time, as have the number of completions at not-for-profit colleges. Overall, for-profits awarded less than half as many degrees and certificates as the not-for-profit colleges in health care programs from 2002 to 2009.

Part of the confusion in assessing the role of for-profit schools is that most reports only examine whether these institutions are training students in the health fields generally. They do not look deeper into which individual programs students are completing. We will begin to disaggregate the health professions to see which professionals the for-profit and nonprofit schools are educating. The numbers tell an interesting story.



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS), 2008-2009.

Who are the for-profits training?

The bulk of for-profit graduates are clustered in just a few programs even though for-profit colleges offer a large variety of health care programs. (see Table 2) In fact, nearly one-third (31 percent) of all the degrees and certificates completed in health-related programs at for-profit schools were in “medical/clinical assistant” programs in 2008-2009 (77,210). For-profit schools are providing nearly all the formal training for medical assistants in this country (88 percent). This occupation is an important part of our workforce but the need for medical assistants is certainly not as significant as the need for other workers such as registered nurses and home health aides.

It is interesting, though, that the second-largest area of degree and certificate production in health-related programs at for-profit schools is a profession not estimated to be in great demand over the next decade: massage therapy and therapeutic massage. For-profit colleges trained nearly all the nation’s massage therapists: 25,332 certificates in 2008-09. More than 10 percent of all the health-related completions at for-profit schools were massage therapists.

The next set of programs at these colleges have similar completion numbers. They include dental assisting, licensed practical nursing, pharmacy technician, medical insurance coding, and registered nursing. In each of these program areas the for-profit colleges produce a fair number of degrees and certificates—more than 10,000—but nowhere close to the number of medical assistants and massage therapists. In addition, this represents only 7 percent of all the RNs trained in the United States annually, as the not-for-profit colleges conferred more than 150,000 credentials in registered nursing.

Table 2 compare the top 10 largest health programs at for-profit schools to the more traditional not-for-profit colleges. There are striking differences. For registered nurses—the profession with the greatest need over the next decade—the not-for-profits are educating nearly all (93 percent). Not-for-profit schools are also training the vast majority of LPNs (80 percent) and nursing aides (89 percent). Further, the for-profits have not conferred degrees in two of the largest health care programs at the not-for-profit colleges and universities: pharmacy and medicine.

The top education programs at the for-profit colleges largely fit into the category of health care “support occupations” or workers who provide assistance to practitioners and technicians either by providing basic patient care or by completing the administrative tasks necessary to keep a medical office or hospital running. In

TABLE 2
The 10 largest health care educational programs in the for-profit and not-for-profit sectors by completion

| Most popular programs for for-profit schools | | | | Most popular programs for not-for-profit schools | | | |
|---|------------------------------------|--|-----------------------------------|---|--|------------------------------------|-----------------------------------|
| Program | Number of completions (for-profit) | Number of completions (not-for-profit) | Percent of completions nationwide | Program | Number of completions (not-for-profit) | Number of completions (for-profit) | Percent of completions nationwide |
| 1 Medical/clinical assistant | 77,210 | 10,531 | 88% | 1 Nursing/registered nurse* | 153,640 | 10,797 | 93% |
| 2 Massage therapy/therapeutic massage | 25,332 | 2,926 | 90% | 2 Licensed practical/vocational nurse training | 45,571 | 11,695 | 80% |
| 3 Dental assisting | 13,578 | 5,499 | 71% | 3 Nurse/nursing assistant/aide and patient care assistant | 35,993 | 4,524 | 89% |
| 4 Licensed practical/vocational nurse | 11,695 | 45,571 | 20% | 4 Emergency medical technology/technician | 22,539 | 1,164 | 95% |
| 5 Pharmacy technician/assistant | 11,629 | 3,579 | 76% | 5 Medicine (M.D.) | 16,547 | 0 | 100% |
| 6 Medical insurance coding specialist | 11,036 | 2,819 | 80% | 6 Pharmacy | 11,601 | 0 | 100% |
| 7 Registered nursing* | 10,797 | 153,640 | 7% | 7 Medical/clinical assistant | 10,531 | 77,210 | 12% |
| 8 Allied health and medical assisting services/other | 8,454 | 1,372 | 86% | 8 Physical therapy/therapist | 9,367 | 76 | 99% |
| 9 Medical insurance specialist/medical biller | 7,583 | 1,270 | 86% | 9 Health/health care administration/management | 7,564 | 3,220 | 70% |
| 10 Medical administrative/executive assistant and medical secretary | 6,912 | 4,574 | 60% | 10 Medical radiologic technology/radiation therapist | 7,076 | 2,309 | 75% |

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, 2008-2009.

Methodology: For these tables (this analysis) we used the numbers of “completions” as defined in the Integrated Postsecondary Education Data System and used their Completion in Program, or CIP, codes. For the “registered nursing” code, this includes about 9,000 master’s degree programs and some RNs who are going back to obtain a bachelor’s degree. Therefore not all of these completions will be new RNs. Specific RN-BSN programs are not identifiable in this data set, but instead “BSN” completion. This does not include the specific nursing master’s degrees such as nurse practitioner, nurse midwife, and nurse anesthetist.

*Note, these numbers include all “registered nurses” as defined in the IPEDS. This includes some in master’s degree programs and some RNs who are going back to obtain a bachelor’s degree, therefore not all of these completions will be new RNs.

contrast, the doctors, nurses, and LPN credentials produced at not-for-profit colleges in large numbers contribute to more direct patient care requiring diagnosing and treatment.

There are likely a few explanations for these differences. For one, for-profit colleges tend to cater to a less academically prepared segment of the population—much like community colleges. They therefore are less likely to offer advanced programs such as medicine and pharmacy and nursing. Since community colleges are most analogous to for-profit schools it is interesting to examine the number of completions at these schools. The two largest health-related completions in com-

munity colleges were nursing, where they conferred more than 57,000 degrees and certificates in registered nursing and 32,500 LPN/LVN diplomas. Medical assistants were the fifth-largest program (after nurse's aides and emergency medical technicians) and numbered just more than 7,000.²⁰

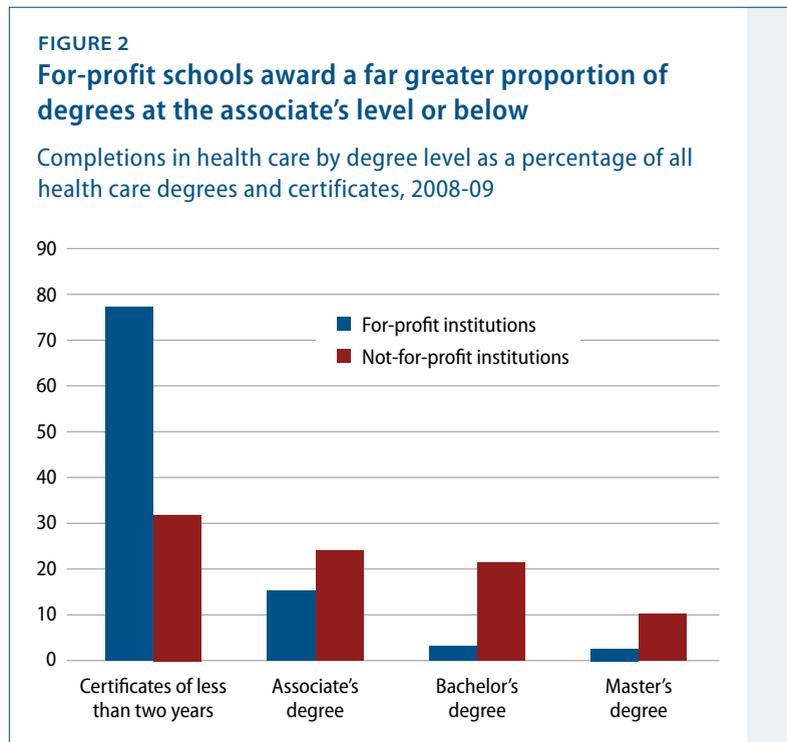
Another reason for these differences may be that for-profit colleges maximize profit by providing low-cost educational programs. Nursing education is expensive, from faculty salaries to equipment and clinical hours. Programs such as medical assisting, dental assisting, and medical insurance coding can be provided at a low cost through a heavy reliance on online education. A related factor may be that programs such as nursing and medicine entail far more direct contact with patients and therefore cannot be provided fully through the online education that is popular at many for-profit colleges.

For-profit schools mostly award health care degrees below the baccalaureate level in 2008-2009

It is important to reiterate that the for-profit institutions work predominantly in the sub-baccalaureate areas of health care education. Seventy-eight percent of all health care credentials awarded at for-profit institutions in 2008-09 were certificates below the baccalaureate. (see Figure 2) In contrast, only 32 percent of the credentials awarded in health care programs at not-for-profit colleges were certificates below the baccalaureate.

One reason for this observed difference may be that for-profit colleges tend to serve a different population than not-for-profits and this may affect their likelihood to offer sub-baccalaureate programs instead of more advanced programs. Certificate-level programs also are shorter and less expensive to provide.

This observation is in no way a condemnation of the for-profit sector. Certificate and



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, 2008-2009.

associate-level programs will likely play a big role as colleges and universities work to meet President Barack Obama's goal of increasing the number of Americans with postsecondary credentials. In addition, these shorter programs may emerge as a particularly cost-effective and practical way to give working Americans the skills they need and get them back into the workforce quickly. Nevertheless, many health professionals that the nation will need in the next decade will have to earn a four-year degree or higher and for-profit schools are not currently set up to offer this type of health professional program.

Which gaps in the health care workforce do for-profit schools fill?

One way to consider how for-profit colleges contribute to the health care workforce is to compare the number of degrees or certificates completed in a given educational program to the occupations most in demand in the next decade.

In some cases there is not a one-to-one match between an educational program and an occupation. Medical secretary, as defined by the Bureau of Labor Statistics, can be performed by someone who completed any number of different programs including medical office assisting, medical billing, and medical executive assistant, or by someone who has only a high school diploma and completes on-the-job training.

Readers should also bear in mind that the number of degrees produced is a rough estimate of the number of people available to enter a particular occupation. For one thing, some graduates may choose to enter an occupation that does not relate to the educational program he or she pursued. For another, in some lower-skilled occupations there may be job seekers who did not pursue an occupation-related educational program because they can be trained on the job in lieu of education.

For-profit schools are contributing only a modest amount of graduates in many of the areas where the nation will need many health care workers in the coming years. Less than 7 percent of registered nursing program graduates in 2008-09 came from the for-profit sector and only 11 percent of the nursing aides, orderlies, and attendants came from that sector, with no physicians or pharmacists. The 10,797 registered nursing degrees at for-profit colleges in 2008-09 are only a drop in the bucket when compared to the need for more than 1 million new workers in that area by 2018.

In other areas, however, including medical assisting, medical secretaries, and medical record technicians, the for-profits contributed an overwhelming majority of the degrees and certificates. If for-profit colleges maintain the same number of degrees and certificates each year for the next 10 years in these programs that likely would be more than sufficient to meet the workforce needs.

The health care areas in which the for-profits dominate tend to be in the supportive or administrative and assisting areas of the health care workforce—most of which need two years or less training. A possible explanation, mentioned earlier, is that for-profit colleges tend to serve a lower-income, less academically prepared segment of the population. These students would typically engage in programs that are shorter and less academically challenging such as the supportive occupations. These administrative and assisting programs also tend to be less expensive to provide because they are shorter and include no (or few) clinical hours. These programs are more easily provided online and at a larger scale. That makes them more suited to the business model that for-profit colleges usually favor.

It is also important to note that for-profit schools produce significant numbers of completers in health fields that are not necessarily high-need areas. They produced 25,332 completers with a first major in massage therapy in 2008. The Bureau of Labor Statistics projects that between 2008 and 2018 there will be only 39,500 job openings in this occupation. If the for-profit colleges continue to produce such high rates of massage therapists there will be far more people qualified to work in this field than is predicted to be necessary.

The future role of for-profit schools in selected high-need professions

Nursing

Nursing is an extremely important occupational area. It is central to the function of our health care system. There will be a steady need for nurses over the next decade. The for-profit sector is rapidly expanding in response to this need. In 2008-09 for-profit schools produced 10,797 degrees in registered nursing—a number that more than doubled in two years. In 2006 the number of completed RN degrees at for-profit schools was only 4,819, and 6,755 in 2007.²² There are now about 100 for-profit registered nursing programs currently operating and of the 10,797 completers in 2009, 2,242 (more than one-fifth) were graduates of the University of Phoenix's online program.²³

Be aware, though, that a degree in “registered nursing” does not always produce a new RN. It is increasingly popular for nurses who initially became RNs by earning an associate’s degree to return to school for an “RN to BSN” program. These programs allow RNs to get a baccalaureate degree in nursing by taking one to two years of additional coursework. Students who complete an RN to BSN program may come out more skilled and perhaps even more employable. But they would not count as new RNs since they were already qualified to work as registered nurses with their associate’s degree.

As an example, the University of Phoenix’s “registered nursing” program provides mostly RN to BSN degrees, which means those graduates are not new nurses. Many other institutions, including not-for-profits, also offer RN to BSN programs. But because of the way the data are collected it is difficult to ascertain just how many of the completions in “nursing” each year are RN to BSN credentials. It is also easy to see why institutions would want to offer these programs. They are rising in popularity, can be provided mostly online, and require far fewer patient-centered clinical hours or other costly in-person training that are integral to the basic, traditional RN programs.

One other point that is not specific to for-profit schools but unique to educating RNs is the shortage of nursing faculty. Many students seem to know about the looming nursing shortage and they are interested in becoming nurses. Yet while the interest in nursing careers is high, potential students are being turned away because there are not enough faculty to teach them. Almost 50,000 qualified applicants to professional nursing programs were turned away in 2008, including nearly 7,000 to master’s and doctoral degree programs. More than three-quarters of the nursing schools responding to a survey pointed to faculty shortages as the reason for not accepting all qualified applicants into entry-level baccalaureate programs.²⁴ Clearly, to fix the nursing shortage we must also find ways to address the dearth of nursing faculty.

Physicians and surgeons

In the 2008-09 academic year for-profit colleges did not produce any physicians or surgeons in the United States.²⁵ Given the projected need for physicians over the next decade (260,000 by 2018) this could also be an area of growth for proprietary colleges. This would be a very different role for them, however, given that they award mostly two-year degrees and certificates and physician training is obviously much longer.

There are two new efforts underway to train physicians at for-profit institutions in the United States. Rocky Vista College of Osteopathic Medicine in Colorado accepted its first class of students in 2008-09 and it is accredited to offer D.O. degrees. Another institution, Palm Beach Medical College, is seeking accreditation and approval to grant medical degrees in Florida.

It remains to be seen whether these institutions are successful in their endeavor. These medical colleges should be watched closely for the potential to open up a quality, affordable path to a medical degree.

Medical assistants

One cannot possibly discuss the role of proprietary colleges in health care fields without talking about medical assisting. Medical assistants are becoming an indispensable part of the modern health care facility. They fill both administrative and clinical roles. For-profit colleges produce tens of thousands of medical assistants each year. Surely the work they do in this area is important. The problem is that they may be producing too many of them.

The projected need for medical assistants by 2018 is just less than 218,000. There were almost 88,000 degrees and certificates in medical assisting produced in the 2008-09 academic year alone. More than 77,000 of these were awarded at for-profits. It seems likely that at the current rate of training, a surplus of individuals will be qualified for these jobs by 2018. And at for-profit colleges 88 percent of the credentials produced in medical assisting are certificates.

These numbers lead to questions as to whether colleges should be encouraging students to go into medical assisting programs and at what level. We know little about the difference in outcomes between a certificate-level program and an associate-level program in medical assisting or any other field. What skills are conferred with the associate's but not the certificate? Are these necessary for the occupation or for career and educational advancement?

And with so many medical assistants graduating each year, one might wonder whether any of these students should be encouraged to pursue a degree in nursing. The needs are greater in that field and earnings are significantly higher.

Career ladders: Making the most of skills, interests, and workforce needs

All of these considerations about workforce needs and educational programs are nothing without considering an individual student's aptitudes, desires, and previous academic experiences. Any policy that seeks to maximize the capacity of educational programs to address gaps in the health care workforce must take these student-centered factors into account.

To do this, some educational institutions focus on career ladders or career pathways. These are educational programs that build upon one another so that students can tailor their education to their strengths and interests but also pursue advanced education when they need it.²⁶

The applied baccalaureate is an example of a career ladder program. In these programs, students with applicable experience and academic history can opt for fast-track programs to baccalaureate degrees in high-demand areas. Applied baccalaureate degrees may be offered at either community colleges or at four-year institutions. For instance, an LPN to BSN program allows a student to combine the skills they acquired in their LPN program and apply them toward a baccalaureate program in registered nursing—both a new occupation and an additional degree.

Another example of a career ladder program would be a stackable credential program, in which a college or university offers a series of certificates that build upon each other. Each certificate caters to a particular level of academic preparedness, which allows students to earn credentials while building the academic skills they need to reach the next level. At Maricopa Community College in Arizona, students can participate in a sequence of certificate programs that lead to an associate's degree in health information technology. The students can develop their skills in small chunks along the way.

It is worth investigating whether the students who enter medical assisting programs at for-profit colleges have the desire to become registered nurses or other high-demand professionals like licensed practical nurses. If so, do the students have the academic preparedness to pursue these programs, or should for-profit colleges work to develop a more direct career pathway from medical assisting to the nursing fields? And would the credits garnered at a for-profit college transfer into programs at other institutions if the student should decide to seek more advanced training?

To meet the needs of the health care workforce of the future, encouraging students to choose high-demand health fields and enticing colleges to offer these programs is extremely important. But equally important is ensuring that the programs they pursue offer a quality education at a reasonable price. The following section reviews some of the measures available to students to find quality, affordable programs among the wide variety of health-related programs offered at both for-profit and not-for-profit institutions.

Measures of educational program value: A combination of price, quality, and expected returns

Programs in both the for-profit and not-for-profit sectors will always vary in quality even if for-profit colleges are subjected to additional regulation through the gainful employment rule or other measures. Students need ways to choose among these institutions to make the best choices for their budgets, their learning styles, their convenience, and their educational goals. And policymakers need better measures of quality and cost per credential so they can judge whether for-profit colleges are providing a valuable contribution to the health care workforce in light of the significant investment of federal financial aid dollars.

Policymakers must consider whether the programs are of sufficient quality to justify allowing students to use federal grant and loan money to pursue education at these institutions and whether the price charged by a particular college is an efficient use of limited public funds. Students should ask whether the added expense of pursuing a for-profit college education over a less expensive public institution can be justified by the merit of the programs, the job placement services, academic support, or some other characteristic. Both policymakers and students should make their assessments by considering the price of for-profit education, the likely payoff of attending a particular educational program, and the quality of the programs.

There may be some baseline in terms of how much an institution should charge for a program depending on a student's ability to earn a living as a graduate. But we generally consider the question of value to be an individual decision. In other words, a student choosing between an expensive for-profit college and a more affordable option should be able to make this choice in much the same way as another student choosing between an elite four-year college and a less expensive public four-year. To support consumer decision making based upon quality and value, we must provide students with the best information available about the price of programs, their likely earnings, and measures of quality.

The discussion here will show that many different indicators tend to shed light on the quality and value of an educational program. But many of them are fundamentally flawed. For instance, graduation rates do not fully reflect the educational successes that take place at community colleges and for-profit colleges. Other indicators are not accessible to the public. Job placement rates and licensure examination passage rates, for example, are not publicly available in a format that would allow prospective students to compare across institutions.

Price: Tuition, fees, and other student costs

The differences between for-profit and not-for-profit models of education make it somewhat difficult to compare prices. Many for-profit colleges charge at the program level whereas the majority of not-for-profit colleges and universities charge tuition on a semester basis. A community college may charge a yearly (two-semester) tuition and a student's total program charge would be based upon how many semesters the program runs. A for-profit may charge one flat tuition price for the entire program. This allows the institutions the flexibility to charge higher tuition for programs that cost more to deliver and it also gives students a better idea of the full cost of their education. But it makes it more challenging for students to compare prices across institutions.

Table 3 attempts to shed some light on the differences between the two sectors and allow for comparability. To facilitate the comparison, only institutions that price by the year are included. The following is a list of the average tuition and fees and average price of attendance for the 2009-2010 academic year by institutional sector. Here, we make distinctions among two-year, less than two-year, and four-year institutions, and among in-state and out-of-state tuition at public institutions to reflect the significant differences in price across these categories. In this table, both public, two-year institutions are generally what we call community colleges.

For the four-year programs the prices are not so dissimilar between the for-profits and the not-for-profits. The tuition and fee prices charged by for-profit institutions fall between

TABLE 3
For-profits are more expensive than not-for-profits at the two-year level

Average tuition and fees for undergraduates, 2009-10 academic year

| Sector and level of institution | Average tuition and fees |
|--|--------------------------|
| Four-year institutions | |
| Public, in-state | \$6,393 |
| Public, out-of-state | \$15,078 |
| Private, not-for-profit | \$21,050 |
| Private, for-profit | \$15,715 |
| Two-year institutions | |
| Public, in-state* | \$2,970 |
| Public, out-of-state* | \$6,187 |
| Private, not-for-profit | \$10,266 |
| Private, for-profit | \$14,280 |
| Less than two-year institutions | |
| Public, in-state | \$5,106 |
| Public, out-of-state | \$5,584 |
| Private, not-for-profit | \$8,982 |
| Private, for-profit | \$12,807 |

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall 2008, Institutional Characteristics²⁷

*Community colleges

that of a public, four-year institution's out-of-state tuition and a private, four-year institution.

The price difference is much more obvious when comparing two-year institutions. The average price of tuition and fees at for-profit colleges is significantly higher than private not-for-profits and public two-year institutions. The same is also true for the less than two-year schools.

It should be noted that part of the price differences observed here can be attributed to the fact that the cost of providing education at public institutions is subsidized by the state. At Fresno City College in California, for example, the 2008 in-state tuition rate was \$508, but the average tuition-plus-subsidy per student was \$8,352.²⁸ This tidbit of information is of little importance to individual students, however, because they are still stuck with the whole cost of education at the for-profit and private not-for-profit institutions.

The significant variations in price reflected here are important for both students and policymakers. For students, the high price tag of for-profit institutions at the two-year level makes it extremely important to ensure that they are getting their money's worth. For policymakers, the widely different prices across the different sectors of postsecondary education should raise questions about how much it actually costs to deliver college education and how limited public dollars should be allocated toward paying these costs.

Student aid

The sticker price should not be the only consideration for students choosing a college. Most colleges offer some kind of financial aid. This is typically a combination of both federal and state aid. In addition, not-for-profit schools also often offer financial packages that come directly from the schools themselves (from alumni contributions and endowments). This aid obviously results in a lower net price for the education.

When financial aid estimates are considered in light of the average tuition and fees, for-profit colleges not only have higher tuition than other institutions but they also tend to have less generous financial aid packages offered by these schools. This means that students are left to make up the difference with money out of their

own pockets and through federal and private loans. This should be a real concern for prospective students, particularly if their intended course of study would not likely yield adequate earnings to repay the loans.

The net price of college should not be the only thing a student takes into account when determining the value of a program, however. They must also consider whether there are differences in terms of the quality or the character of the services offered that would justify the increase in price. For instance, a student may determine that a for-profit college offers a faster or more flexible path to a degree or more intensive student services. A student might also consider whether the style of learning offered at the public, private, or for-profit college is more suited to his or her needs. Finally, there is the often-cited issue of capacity: Community colleges certainly offer the least expensive path to a degree but some have waiting lists for high-demand programs like nursing.

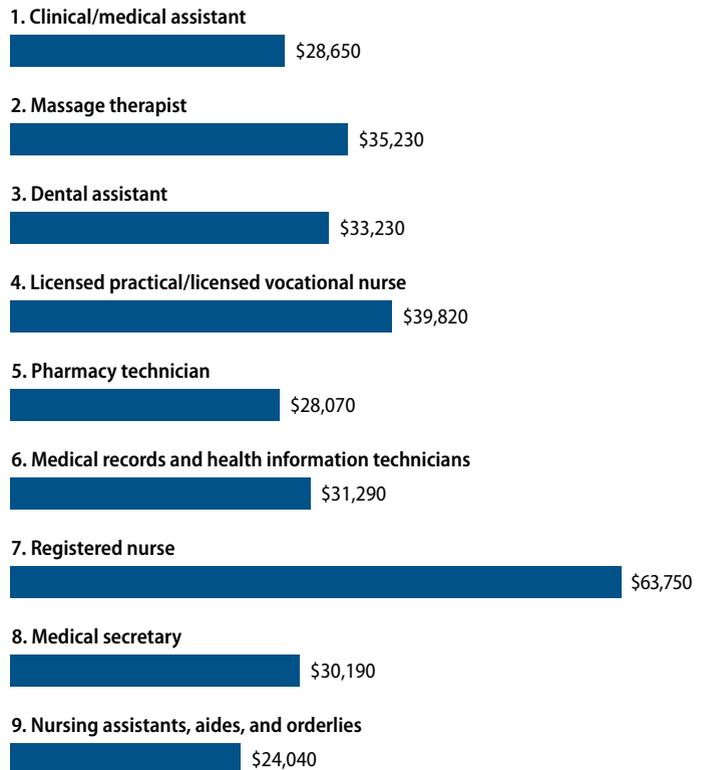
Expected return and future salary

A student also should consider the expected returns to education in terms of projected income upon graduation to make sense of the cost of an educational program. Figure 3 illustrates the median annual wages associated with the top occupations that students at for-profit institution health programs pursue.

We can see from these numbers that some health occupations—such as registered nursing—have significantly higher payoffs than others. This is even more obvious when we consider occupations such as pharmacists, whose median wage is \$109,180. And yet the occupations with the lowest salaries tend to be the most popular health care programs offered at the for-profit colleges. This is, of course, no surprise because the for-profit colleges tend to focus on certificate-level programs and

FIGURE 3
Some educational programs at for-profits have a higher payoff than others²⁹

Median annual wages, top health care occupations for which for-profit colleges prepared students in 2009



Source: Bureau of Labor Statistics, May 2009 National Occupational Employment and Wage Estimates.

less education generally corresponds to lower wages. But given the price of the programs at for-profit colleges one must wonder whether it is possible to give students a little more “bang for the buck.”

For instance, a student who studies to be a dental assistant may have the same set of aptitudes as one who studies to be a dental hygienist. A dental assistant might make \$33,230 annually while a dental hygienist would make around \$67,340. Dental hygienists are also a high-need area in the workforce, so the question is: Can we encourage students to enter hygienist programs instead of assistant programs or engage in dental assisting as the beginning of a career ladder rather than as an end in itself?

Quality: Many measures and even more questions

Measuring the quality of educational programs is difficult. Higher-education policymakers continue to debate the value and relevance of federally mandated, comprehensive measures of learning in postsecondary programs such as examinations to assess college learning. Without such measures, however, we are left to rely on a hodgepodge of other indicators. Some of these are readily available to the public and some are not.

Below we discuss some of the indicators of quality, their merits, and their availability to students and policymakers to gauge the quality of the most popular programs in for-profit health care education. We particularly highlight institutional and programmatic accreditation. We also highlight certification, licensure, graduation rates, job placement rates, and examination pass rates as these are particularly useful for students shopping for schools.

Program accreditation vs. institutional accreditation

Accreditation is a baseline measure of quality for educational programs. There are two levels of accreditation: one for the institution overall and one for the individual program offered at that institution.

All postsecondary institutions that receive federal student assistance must be accredited by an accreditor that is recognized by the Department of Education.

Institutional accreditation ensures that the entire college or university meets expectations of legitimacy. But it does not speak to the specifics of individual programs.

For some programs, particularly those in professional areas, an additional layer of programmatic accreditation may be applicable. Many states require that students graduate from accredited programs to receive certification in areas such as law, medicine, nursing, and teaching. This complicated system of quality assurance can be difficult for students to navigate. And though accreditors' evaluations of institutions uncover information about institutions that could be very helpful to individual decision making, this information is not publicly available. That does not help students make better choices.

Institutional accreditation

There are 19 institutional accrediting organizations in the United States that accredit around 7,000 institutions, both for-profit and not-for-profit. These private organizations stress a voluntary system of quality control. The idea that higher education institutions should be primarily responsible for their own quality is a core principle of institutional accreditation, according to the Council for Higher Education Accreditation, the leading voice for voluntary accreditation. The accreditation process is built around the idea that an institution's mission should be the touchstone for judging academic quality.

When accreditors like the New England Association of Schools and Colleges, or NEASC, evaluate the quality of institutions, the standards revolve around the mission of the particular institution. For instance, it asks whether the academic programs are of sufficient quality and integrity to achieve the institution's mission. Similarly, NEASC requires that institutions maintain a faculty sufficient to fulfill the mission in terms of qualifications, numbers, and performance.

Institutional accreditation will ensure that an institution's educational offerings are in line with its mission but the process often has little to do with the quality of the student outcomes. NEASC states that its accreditation does not guarantee the quality of individual programs, courses, or graduates.

The value of accreditation as a symbol of quality is seriously undermined by the practice of "buying accreditation." Since accreditors re-evaluate the status of institutions infrequently, a for-profit institution can acquire accreditation by buying a small not-for-profit college that already has accredited status. Often, these for-profit institutions expand the reach of the colleges well beyond the mission, scope,

and size of the original institution, bringing into question whether its accreditation means anything at all.³⁰

Program accreditation

Program accreditation differs from institutional accreditation in that it looks more closely at the delivery of education within the discipline. The Department of Education recognizes more than 40 program accrediting agencies, including at least 25 agencies that accredit health-related programs. The Council for Higher Education Accreditation recognizes at least 61 agencies. Among other areas, there are program accreditors for nursing, optometry, podiatry, radiologic technology, pharmacy, and medical assisting.

The programmatic accreditation process for nursing programs provides a good example of how this type of accreditation works. Both the Commission on Collegiate Nursing Education and the National League for Nursing Accrediting Commission, or NLNAC—the two independent accreditors for nursing programs—require programs to meet requirements related to mission, administrative capacity, faculty and staff, students, curriculum, resources, and outcomes. Some of the standards are as vague and self-referential as the institutional accreditation requirements listed earlier. But there are more concrete requirements around student learning outcomes.

For instance, NLNAC requires that an accredited nursing education program design its curriculum around student learning outcomes and best educational practices. Students must engage in clinical experiences that conform to nationally established patient care goals. Programs must demonstrate achievement in student performance on licensure examinations, program completions, program satisfaction, and job placement. Additionally, accredited programs must maintain licensure exam pass rates that are at or above the national mean. These standards are tangible and they are related to notions of quality in nursing education that exist outside of the mission of the particular institution.³¹

Why accreditation matters (especially in health care)

Institutional and program accreditation certainly ensure some basic level of quality in educational institutions. The relationship between program accreditation and institutional accreditation is complicated, however, and it is often not clear to students. This may not matter to most college-bound students. But it is extremely

important in health care fields where programmatic accreditation may or may not be a prerequisite to practicing in a given state.

Whether a program is accredited by a recognized body may be critical because upon completion of a program, some health care students go on to become certified or licensed for the profession for which they were trained. In many instances, a student is not qualified to sit for the certification or licensure exam unless they graduated from an “accredited” program. They are not able to practice their trade unless they have that certification or license.

The accreditation system’s complexity is illustrated by the following example of students training to become medical assistants at the Everest College in Hayward, California—a for-profit college owned by Corinthian Colleges, Inc. Last year, a group of students from Everest boycotted classes after they found out that a medical assisting degree from the college was not accredited and therefore would not qualify them to become certified by the American Association of Medical Assistants. Certification is not required to practice as a medical assistant in California. But some employers prefer to hire students who have obtained certification by attending an accredited program and becoming certified.

Students often do not understand the relationship between program accreditation and institutional accreditation. They may be unclear about whether a lack of program accreditation signifies a lack of quality in the education provided or even some kind of fraud perpetrated by the institution. Another point to make here is that program-level accreditors, like the American Association of Medical Assistants, who accredit programs even though accreditation is not required by law can be both good and bad. At its best, the accreditor serves as an independent voice holding educational programs to common standards on which experts in the field agree. At their worst, however, these accreditors can be certifying the quality of programs without ever really judging it and charging students for official-sounding certifications that do not have any meaning or value in the market.

State certification and licensing examinations

Certifications and licenses are acquired by students upon completing a program. States require that many health professionals pass a licensing examination and meet certain basic requirements in order to practice within the state. This is true across all states for most health professions that have direct contact with patients

such as physicians, dentists, pharmacists, registered nurses, and licensed practical nurses. Licensure or certification can be left up to state discretion for other health professions.

For most of these professions the exam is the same nationally (though offered by the state) and therefore the average pass rates on these exams can be used as another measure of quality for the educational programs. Institutions with high pass rates are likely doing a good job of educating students in the field and institutions with low pass rates are doing a poor job.

Registered nursing provides a good example. Students must take and pass the national NCLEX-RN examination to become a registered nurse in the United States. Passage rates for this exam are not available at a national level but Table 4 shows the average NCLEX pass rates for for-profit and not-for-profit institutions in a sampling of five states.

The NCLEX-RN results here show that the pass rates are somewhat lower at for-profit registered nursing programs than at not-for-profit programs. While the for-profit pass rates are not low by any means, it is worth pointing out that students who study to be registered nurses but do not pass state licensure requirements are not able to practice in their occupation—a critical setback for the new graduate who will miss out on employment within the field until he or she can pass.

NCLEX pass rates give us some indication of the quality of the education registered nursing students receive at for-profit colleges. In many of the fields in which for-profit colleges train students, however, either there is no national licensing exam or the results of these exams are not readily available to the public. Certainly

TABLE 4
For-profits lag slightly behind not-for-profits on nursing licensure exams

Passage rates for nursing licensure exams at for-profit and non-for-profit institutions in four states

| State | Passage rate, for-profit institutions | Passage rate, not-for-profit institutions |
|------------|---------------------------------------|---|
| Arizona | 83.5% | 90.3% |
| California | 85.5% | 89.2% |
| Florida | 84.6% | 88.6% |
| Ohio | 84.4% | 88.3% |

Source: CAP analysis of State Licensing Pass Rates.

there are many occupations for which there is no need for a licensing examination. But we should work to find similar measures of quality that are meaningful and easily communicable to prospective students and policymakers so they can compare programs at different institutions.

For-profit colleges dominate the market in the medical assisting area, for example, and there is a great need for a uniform measure of the competency and performance of these graduates. The American Association of Medical Examiners offers a certified medical assistant examination but the pass rates are not readily available.

Graduation rates

The fact that students who begin an educational program are able to complete the requirements for graduation also can signal the quality of the educational services offered. Of course, it can also be a signal of a student's academic preparation, desire, or ability to finish—or a sign that the educational program is inherently easy or difficult to complete.

Policymakers and the public do not have access to program-level graduation rates—only the number of students who complete particular programs each year. We therefore must look to the institutional graduation rates to try to understand how many students are finishing the programs they begin. The problem is that the way institutional graduation rates are calculated is flawed. This makes it difficult to compare for-profit colleges to not-for-profits.

The available data on graduation rates have been criticized by many. The most problematic factor in assessing graduation rates is that the data only take into account “first-time, full-time” students, so they do not account for the growing number of students attending part time. Since part-time students are most prevalent in community colleges, some argue that the graduation rates paint a grimmer picture of their successes than they should. According to this indicator, for-profit colleges boast a graduation rate of more than 50 percent for associate's and certificate programs, but community colleges have an alarming 22 percent rate for these students.³²

Education Sector, an education policy think tank, provides some compelling reasons why we should dig even deeper into these graduation rates and require more schools to report on more students and in less aggregate forms. For instance,

they note another problematic data aspect in the graduation rate data. In this data set, students seeking associate's degrees and certificates are grouped together in a single category. Because of this, it is impossible to get an accurate picture of what's going on at the community colleges and two-year for-profit colleges where the chances of success in the associate's degree programs may look very different than those in a certificate program.

Education Sector was able to perform a more detailed analysis where they separated out the rates of associate's and certificate programs. When they did, they found that the graduation rate for associate's degree-seeking students is still only 21 percent at community colleges but drops to only 19 percent at for-profit colleges. Since for-profit colleges tend to graduate far more certificate completers than associate's degree completers, this could be the reason the for-profit graduation rates seem to be much higher.³³

Graduation rates can be an important piece of information for students when choosing a college. In fact, a recent study by the American Enterprise Institute showed that when students are presented with this information they tend to choose the institutions with higher graduation rates.³⁴ These rates, however, are so flawed as to be meaningless, particularly when comparing across the for-profit and not-for-profit sector. If we are going to hold graduation rates out there as a measure of how well institutions are doing we need to make them as good an indicator as possible.

Missing measures for job placement rates, employer satisfaction, and student satisfaction

There are many other ways to gauge the value and quality of a program aside from the traditional measures described above. In particular, we can assess the worth of an education based upon how well the students fare upon graduation. Job placement rates are a good measure of how the degree is valued in the job market and measures of employer satisfaction indicate whether the degrees are adequately preparing graduates for jobs in their field.

Job placement rates, employer feedback, and the standards employed by state licensing boards are some of the elements that are measured when a program becomes accredited by program accreditation agencies. These independent accreditors and state boards ensure basic standards of quality but they do not necessarily help students make decisions about the value of their education for

the price they're paying. An accrediting agency might require that LPN/LVN programs show a predetermined level of "success" in job placements but there may still be wide variation within that measure among the accredited programs.

Students should be able to make choices about whether to pay more for a particular program based upon this kind of information. But even though accrediting agencies often require this for a program accreditation, institutions are not required to collect this information or provide it to students.

Measure of job placement and employer satisfaction could be particularly important in gauging the success of for-profit colleges because one of their purported strengths is the connection they foster with the employer community. Students need hard data to be able to tell whether these claims are true and this currently isn't readily available.

Students often rely upon the good experiences of others with an educational program to help make their decisions about where to attend. A prospective student might seek advice or suggestions from someone they know who has been through a similar experience. Typically, students seek this kind of advice from friends, acquaintances, or online message boards. But when it comes to for-profit institutions that rely heavily on online education it can be more difficult to find out about other students' good or bad experiences.

Wide-scale ratings of student satisfaction are also not currently available to prospective students. This kind of information could provide a more intimate assessment of the quality and value of the services provided by a particular educational program.

[An incomplete picture of the quality of for-profit health programs](#)

The discussion here begins to paint a picture of the quality and value of health care-related programs at for-profit institutions. But it is nowhere near a complete picture. Institutional accreditation sets a bar for the quality of the institution. It has little to say, however, about the programs offered. Program accreditation can go deeper into the quality of the curriculum and the job placement and examination pass rates. Not all health care programs must be accredited, though.

Accreditation can be one way to monitor the quality of educational programs. Yet providing information directly to students is another. Most of the measures of quality discussed above are either too hard to find, too complex to understand, or simply unavailable to individuals. To better gauge the quality of for-profit health care programs, the federal government and the state boards that govern licensure of health professionals should work to simplify the accreditation of programs and make more measures of quality available to the general public.

Conclusions and recommendations

Colleges can play an important role in shaping the American workforce. In particular, community colleges and for-profit institutions that offer primarily two-year and certificate-level programs provide short, timely infusions of work-place-relevant skills. At best, these institutions are responsive to the needs of the workforce and collaborate with employers and industry representatives to craft their educational offerings.

Nevertheless, the recent focus on for-profit education in the media and in the federal government shows that workforce needs are not the only considerations governing decisions about college courses. For-profit colleges by their very nature seek to maximize revenue, so they may prefer low-cost (but not necessarily low-tuition) programs. These institutions also take into account the academic rigor of their course offerings since many of their students are not academically prepared for college. And of course, for-profits weigh the popularity of programs with prospective students, the programs' marketability, and the ability to offer them in a distance-learning environment.

It is not hard to understand, then, why for-profit colleges tend to focus on some health fields and not others given all of these competing interests. Programs that require many hours of hands-on patient care and well-prepared students such as medicine and registered nursing are rigorous and very costly to provide. Medical assisting and data management programs, on the other hand, are lower cost, easier to provide online, and accessible to a wider segment of the population. The result is that for-profit colleges tend to focus on health care support occupations rather than practitioner and technician fields.

This report shows that for-profit colleges' contribution to the health care workforce is highly concentrated in medical assisting—a field that is in demand but not nearly as crucial to our future health care workforce as the nursing fields. The problem is not the for-profit schools' actions but rather the way the colleges have

sold their services to the public. Right now, for example, for-profit schools are under scrutiny by the media and the public and are engaging in a media blitz in which they imply they are training more advanced health providers.

As for preparing nurses, there are several barriers to educating nurses that can affect both for-profit colleges and not-for-profit ones. These include difficulty recruiting faculty members and finding opportunities for clinical hours. It is unclear, however, whether these obstacles are the reason why for-profit colleges do not train many nurses or whether the cost of providing the services or academic preparedness of the student body is the issue—or some other factor is the true cause.

Still, the for-profit health care education sector has problems that need to be addressed in addition to their role in supplying health practitioners. The most alarming is that they are training health professionals that are not predicted to be needed in the next decade and therefore might have trouble finding employment. The volume of massage therapists is one illustration. BLS projections do not indicate that these skills will be in high demand. Are graduates of these programs getting jobs? Will these graduates be able to pay back their often sizable student loans?

Another potential problem is the open question of whether the educational opportunities offered at these colleges justify the high price tag. We know that many of the graduates of health care programs at for-profit colleges go into relatively low-paying fields. The available measures of quality such as accreditation and graduation rates do not give any indication that it is worth taking on the additional financial burden without hopes of additional financial gain. It is possible that average salary information or job placement rates might show that for-profit college graduates fare better in the job market than graduates of community colleges. But how much better could they fare given that the upper end of the salary scale for medical assistants is not particularly high?

Recommendations

This report has identified three main issues that must be resolved to maximize the health care workforce and the role of for-profit colleges:

- For-profit schools are not making a significant contribution to training the highest-demand health professionals. This is partly due to the very nature of the type of programs for-profit schools currently offer.

- For-profit institutions are training health care workers who may have a hard time finding a job or will only find work in jobs at the lower end of the pay scale.
- Quality measures now in place make it nearly impossible for students to make informed decisions about choosing a health professional education program.

We address these problems through the following three recommendations:

- Incentivize schools to offer and students to choose health career programs in fields that meet the nation's future health care workforce needs.
- Help students choose the best course of health care study that will pay them a good wage.
- Improve quality measures to help students make better and more informed decisions.

We review these recommendations and provide more detail on how to put them into practice.

Incentivize schools to offer and students to choose health career programs in fields that meet the nation's future health care workforce needs

Colleges cannot be expected to fully meet the demand in areas such as registered nursing, licensed practical nursing, and other high-need fields on their own. A federal voice is necessary to help identify the demand for health care workers and help working Americans understand the opportunities in the field, as well as study barriers to meeting the demand. These issues are better addressed at a systemic level than by the individual institutions that have been struggling with them for years.

Here are some steps the federal government can take to encourage students to choose high-demand programs and schools to offer these programs.

Create incentives for students to pursue and complete health care education in high-demand areas by expanding the National SMART Grant program

Too many students are pursuing health care education that yields lower skills and wages, as documented above. We need to provide them with incentives to move up the value chain of health care education and employment opportunities if they so desire.

The U.S. Department of Education has a grant program called the National Science & Mathematics Access to Retain Talent Grant, or National SMART Grant.³⁵ Through this program, low-income students can receive additional grant dollars—in addition to the Pell Grant—if they major in certain math and science fields. We recommend the Department of Education expand the current eligible fields of study for its SMART grant program to include high-wage, high-demand health care occupations.

[Find opportunities to have the Departments of Health and Human Services, Labor, and Education partner to enhance their individual efforts to strengthen the health care workforce](#)

Getting qualified individuals into the health care workforce is an issue that spans the responsibility of three different agencies—the Departments of Health and Human Services, Labor, and Education. Each department initiates programs that contribute to strengthening the health care workforce.

The Department of Health and Human Services’ Health Resources Services Administration, or HRSA, is devoted to improving access to health services. Their major focus is to get health professionals to the areas of the country that need them the most. Their Center for Health Workforce monitors the workforce shortage and provides policymakers with the information necessary to make informed decisions regarding the health professions workforce and provision of care.

HRSA provides scholarships and loan repayment to health professionals who work with underserved populations. Its Area Health Education Centers expose K-12 students to careers in health care through community-based training sites and service learning. It also analyzes data on the health workforce shortage to better understand the barriers to entry.

The Department of Labor is helping to build the health care workforce by encouraging workers to seek training in areas that match their skills and employers’ needs. The “My Skills, My Future” website uses information about a worker’s current occupation and skill level to match them with job postings and training opportunities in high-demand fields. The department also recently funded a project at the American Association of Community Colleges called the “Healthcare Virtual Career Platform” to help students explore careers in health care. The program will provide skills assessment early on to help students find their optimal health career, and it will help with training and job placement.

The Department of Education holds the most in-depth information on how colleges are performing in educating students in health care fields. It further administers most of the money that the federal government spends on educating students for the workforce in the federal student financial aid program.

These departments each have a stake in educating the health care workforce. They all house some of the resources essential to enhancing this workforce. These agencies should work together to ensure that training programs, financial aid, and regulatory frameworks are designed to promote access to quality, affordable health care education.

Help students choose the best course of health care study that will pay them a good wage

For-profit schools are training health care workers who may have a hard time finding a job or will only find work in jobs at the lower end of the pay scale. The federal government and schools can work together to help students choose careers that are well suited to their interests and skills, in demand, and pay good wages. They can also work on making information about health care programs readily available to students so they can choose the right school.

For-profit colleges need to support student success by providing objective career and educational counseling that meets minimum professional standards for the field. These standards are outlined in the National Career Development Guidelines adopted by many states. The colleges would need to document the professional credentials of employees delivering counseling services as well as document the nature of counseling delivered as part of their reporting out for receipt of federal student financial assistance.

Require schools to present mandatory information about job placement, average salary, and graduation rates to students prior to enrollment

Congress and the Department of Education have made admirable strides in collecting and disseminating information to prospective students about the different college options available to them. But the right information is not always easy to find and it often does not get to the students early enough to help them with their educational decisions. We must ensure that students receive relevant information before they enroll in college so it will help them make informed choices.

Under federal law the only students who are entitled to even the most basic information about college graduation rates before enrolling are student athletes who receive athletic aid from institutions. The federal government must extend this benefit beyond athletes to the whole student body.

The Department of Education should require institutions to provide students in career-focused programs with information on graduation rates, job placement rates, and average salary of graduates prior to enrollment to help them decide which program is right for them.

Consolidate admissions, academic, and career advising services

Students often pursue postsecondary education in order to acquire skills that are marketable in the workforce. This is especially true in the short-term associate- and certificate-level programs in which for-profit colleges specialize. Students interested in these programs need objective and competent advice about careers from the moment they begin the admissions process.

The federal government can encourage this by providing students access to career advising services during the program selection process and for some time after entry. These advising services should include real-time information about job openings in health care fields.

To accomplish this, the Departments of Education and Labor should use workforce innovation fund dollars targeted to developing connections between developmental education, occupational training, and postsecondary programs to:

- Fund a five-state demonstration project to build the capacity of frontline one-stop career center staff, nonprofit organizations, and labor unions to provide career guidance for low-income students. States or partnerships of no less than three workforce investment boards would compete for grants that would be used to upgrade skills of the aforementioned organizations to provide career coaching. This demonstration project would include a technology-supported project to keep individual students informed of labor market trends.
- Ensure that students who participate in the demonstration project receive 25 hours of counseling—five hours of which should happen before they can select an institution. Students must be able to document that they have received the counseling before they can apply federal financial aid to their education.

- Track the progress of these demonstration projects to document the effects of career counseling on student choice and success, particularly at for-profit institutions.
- Create a plan for scaling the successful efforts of the demonstration project.

Improve quality measures to help students make better and more informed decisions

Part of helping students make good choices about their educational programs includes ensuring that only high-quality programs are eligible to receive federal financial aid and that students have objective information about the quality of programs. The Department of Education requires schools to submit to the accreditation process and to collect and distribute certain information as a condition of being able to offer student aid to their students.

The federal government should work with accreditors to make accreditation a strong measure of quality based on measures that are relevant to student success. Information about program quality should be available and understandable to students so they can make better decisions about their education and consider fields that may be more in demand and pay a better wage. These recommendations suggest ways to change accreditation and the collection of information to align them with what students need most—affordable, quality educational experiences.

Require outcome measures as part of the accreditation process

The current accreditation process, particularly institutional accreditation, measures inputs such as faculty credentials and classroom hours. But it pays little attention to outputs such as graduation rates, examination passage rates, and competencies. And accreditors certify the quality of educational programs without ever making any information about their reviews available to the public. The Department of Education should work with accreditors to incorporate educational outputs into the accreditation process and make the process more transparent.

It can do this by:

- Convening a conference on the role of accreditors in ensuring quality, standards, and productivity in postsecondary education
- Proposing reforms that require accreditors to develop standards around outcome measures such as competency evaluations integrated into the curriculum, state licensure examinations, or standardized assessments
- Ensuring that, to the extent possible, the outcomes of accreditation reviews are made available to the public

Make accreditation a more user-friendly signal of quality

One way to help students understand the quality of the programs they consider is to transform accreditation into a clear, dependable signal of whether an educational program will prepare them for the job they want.

The U.S. Department of Education should direct accreditors to require that institutions disclose to students their accreditation status along with an explanation of what that status means in terms of both eligibility for federal student financial assistance and opportunities to practice in their chosen profession upon graduation.

Require schools to report additional quality measures to be eligible for federal financial aid

Another way to bring transparency to the quality of educational programs is to make better information about quality available in the places where students seek college information. Students most often turn to individual institutions for information. Nonprofit, federal, state, and local government websites are secondary sources.

The Department of Education determines which schools are eligible to have their students receive federal financial aid. They require schools to report on certain data points as a condition of this eligibility, including enrollment, loan default rates, graduation rates, and average financial aid packages. As part of this process the department should require schools to report additional data elements.

They should, for example, require schools to collect information about examination passage rates, job placement rates, student satisfaction, and average salary information for recent graduates. The department should then post this information on the Department of Education's college search website, College Navigator, as well as act as a clearinghouse of information for other not-for-profit websites aimed at individual consumers.

The department should further require as a condition of receiving federal student financial aid that institutions provide graduation rates, relevant licensure examination pass rates, job placement rates, and average salary information to students in writing at least 10 days prior to the student's enrollment. Students would have access to this information earlier in the process through College Navigator or other sites. But this measure would act as a final safeguard to ensure that students see the information before enrolling.

Lastly, the nursing professions will be in such high demand in the next decade that their program data needs to be clarified. In the Department of Education's IPEDS database, schools describe their program as "nursing" if it educates a new RN, trains an LPN to become an RN, or grants a previously trained RN a new bachelor's degree. Schools use the same code for programs that grant RNs advanced degrees at the bachelor's, master's, or doctoral level.

These programs are clearly very different and many do not produce additional RNs but rather help these nurses expand their education. The data used to describe nursing educational programs must be expanded and clarified to better understand what types of nursing programs students are completing and whether we are in fact meeting demand.

We need policies that help target students toward high-demand health care jobs while making sure that the programs that educate students are of high quality. This is a matter of public policy to fill gaps in our health care workforce over the next 10 years and in registered nursing in particular. In pursuit of these public policy goals, we must use all of the available resources, including the for-profit institutions that are already playing a role in educating the health care workforce.

The recommendations provide ways to strengthen the quality of health care education programs and encourage students to pursue high-demand health care fields. They also will work to ensure that information about the quality of health care programs at for-profit colleges can become part of the public debate.

Appendix

Who are our health professionals?

A guide to the health care workforce

| Occupation | Description | Educational requirements | Projected need, 2008–2018 |
|--|---|---|---------------------------|
| Registered nurses (RN) | Registered nurses, or RNs, provide treatment, care, and education to patients in a variety of settings. They may perform diagnostic tests, administer medications, assist in operating rooms, or assist in preventive care. | <p>There are a variety of ways to become an RN and there are also opportunities for advancement through certification or on-the-job training.</p> <p>Three credentials qualify individuals to become a registered nurse: a bachelor of science, or BSN; an associate's degree, or ADN; or a diploma from a hospital nurse-training program. All nursing programs include both classroom teaching and experiential learning in a clinical environment.</p> <p>Individuals who work as registered nurses must pass state licensing requirements. All states require RNs to graduate from an approved nursing program and pass a national licensing examination known as the NCLEX-RN.</p> | 1,039,000 |
| Home health aides | Home health aides work with people who need assistance due to disability, chronic illness, old age, or other health issues. They may provide care that includes both home-making tasks and basic health services, such as taking a pulse rate or respiration rate or administering medication. | There are no formal educational requirements for home health aides. But those who work in a facility that receives Medicare or Medicaid reimbursements must complete a training program of 75 hours and a competency evaluation. | 552,700 |
| Nursing aides (NA), orderlies, and attendants | Nursing aides, orderlies, and attendants work primarily in nursing care facilities but they also work in hospitals and community care facilities. They perform such tasks as helping patients to eat, dress, and bathe, and they make beds and serve meals. Nursing aides, orderlies, and attendants work under the supervision of nursing staff. | Nursing aides, orderlies, and attendants typically have a high school diploma and some may have some college coursework but no degree. Some states provide formal training programs but many other workers receive much of their training on the job. | 422,300 |
| Licensed practical nurses (LPN) (also known as licensed vocational nurses, or LVN) | Licensed practical nurses work under the supervision of physicians or registered nurses to care for patients. LPNs provide such patient care as recording vital signs, administering injections, dressing wounds, and performing lab tests. LPNs also often take patient health histories. | <p>To become an LPN, a person must complete a training program of about one year, typically offered at a vocational school, a community college, or other two-year college. The programs typically include classroom experiences as well as clinical time.</p> <p>To be certified to practice, LPNs must graduate from a state-approved educational program and successfully complete the NCLEX-PN, a national examination.</p> | 391,300 |
| Physicians and surgeons | Physicians and surgeons diagnose and treat illnesses and injuries. They also provide preventive care. | To practice as a physician or surgeon, an individual must obtain either an M.D. or D.O. credential at an accredited medical school. Upon graduation, he or she must complete at least three years of internship and residency and pass the United States Medical Licensing Examination and any relevant board certification. | 260,500 |

| | | | |
|--|--|---|---------|
| Medical assistants | The medical assistant occupation is a broad category of workers who perform administrative or clinical tasks or some combination of the two. The administrative tasks a medical assistant may perform include filing medical records, insurance forms, and arranging for laboratory services, as well as scheduling appointments and bookkeeping. The clinical tasks may include taking medical histories, recording vital signs, and assisting physicians or nurses. They also may perform laboratory tests and administer medications. | Although there are no formal training requirements for a medical assistant, many complete either a one- or two-year educational program. These programs are offered at high schools, community colleges, and other two-year postsecondary institutions. Certification is not required but it is available through associations such as the American Association of Medical Assistants for students who attend programs accredited by that organization. | 217,800 |
| Medical secretaries | Medical secretaries perform routine administrative work as well as specialized duties that require knowledge of medical terms and procedures. They may work on correspondence and reports, record medical histories, work with insurance and billing practices, or arrange hospital or laboratory work. | Medical secretaries do not need to have any specific degree or certificate but employers require skills related to using computer software programs and knowledge of the language and practices of the industry. These training programs are available through community colleges and other two-year postsecondary institutions. | 189,000 |
| Pharmacy technicians | Pharmacy technicians work under the direction of pharmacists to process prescription requests and count tablets. They may also assume clerical duties within the pharmacy. | No formal training is required but employers may favor pharmacy technicians with training. This can be acquired on the job or in formal educational programs of anywhere from six months to two years. Most states require that pharmacy technicians be registered with the state board. | 182,000 |
| Dental assistants | Dental assistants work under the supervision of dentists to assist in procedures. They also perform office duties such as disinfecting equipment and patient care duties such as applying topical anesthetics or placing dental dams. | Many dental assistants complete a one-year training program at a community college or other two-year college though it is not necessary to have a formal educational credential. | 161,000 |
| Pharmacists | Pharmacists dispense prescription medication and advise patients on taking prescription drugs. | To become a pharmacist, one must earn a Pharm.D. degree from an accredited college. Pharmacists must also obtain licensure from the state by passing a series of exams. | 105,800 |
| Medical and health services managers | Medical and health services managers work to coordinate and supervise the operations of health care facilities. | This field encompasses a number of occupations that may have slightly different educational requirements. To become a medical and health services manager, an individual will typically have a master's degree of some kind, such as in health services administration, though a bachelor's degree may be acceptable. | 99,400 |
| Dental hygienists | Dental hygienists take care of patients' teeth by cleaning them and examining teeth and gums. They may also take X-rays and administer local anesthetics. | Dental hygienists must obtain a degree from an accredited dental hygiene program. These programs are typically associate's degree programs that include both classroom and clinical instruction. All states require dental hygienists to be licensed, including graduating from an accredited program and passing relevant examinations. | 98,400 |
| Physical therapists | Physical therapists work with patients to diagnose and treat problems that affect their ability to function or move about. | A physical therapist must obtain a graduate degree, typically a doctorate. They must also obtain state licensure, which typically entails graduation from an accredited program and passing the National Physical Therapy Examination. | 78,600 |
| Medical records and health information technicians | Medical records and health information technicians gather, manage, and maintain accurate information about patient health. They increasingly use electronic health records systems to facilitate this work. | Typically, medical records and health information technicians have associate's degrees. Employers may increasingly prefer that these employees have a Registered Health Information Technician credential. | 70,300 |
| Radiologic technologists and technicians | These technologists and technicians perform diagnostic imaging such as X-rays and MRIs in a health care setting. | Though the requirements vary by state, most radiologic technologists and technicians have an associate's degree, and most states require licensure. | 68,000 |

Source: Bureau of Labor Statistics, Occupational Outlook Handbook, 2009-2010 edition.

Endnotes

- 1 "Career Guide to Industries, 2010-11 Edition," available at <http://www.bls.gov/oco/cg/cgs035.htm> (last accessed January 2011).
- 2 Mamie Lynch, Jennifer Engle, and José L. Cruz, "Subprime Opportunity: The Unfulfilled Promise of For-Profit Colleges and Universities" (Washington: The Education Trust, 2010).
- 3 Government Accountability Office, "For-Profit Schools: Large Schools and Schools that Specialize in Healthcare Are More Likely to Rely Heavily on Federal Student Aid," GAO-11-4, Report to Congressional Committees, October 2010.
- 4 Integrated Postsecondary Education Data System: Completions, 2008-09.
- 5 "College Navigator - University of Phoenix-Online Campus," available at <http://nces.ed.gov/collegenavigator/?q=university+of+phoenix&s=all&pg=4&id=372213#enrolmt> (last accessed January 2011).
- 6 Michelle Asha Cooper, "A Closer Look at Gainful Employment," *Forbes*, October 12, 2010, available at <http://www.forbes.com/2010/10/12/gainful-employment-regulation-college-university-lifestyle-education-cooper.html>
- 7 United States Senate Health, Education, Labor and Pensions Committee, "The Return on the Federal Investment in For-Profit Education: Debt Without a Diploma" (2010).
- 8 Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, "Help Wanted: Projections of Jobs and Education Requirements Through 2018" (Washington: Georgetown University Center on Education and the Workforce, 2010), available at <http://cew.georgetown.edu/JOBS2018/>.
- 9 Health Resources Services Administration, *The Registered Nurse Population* (Department of Health and Human Services, 2010).
- 10 Institute of Medicine, "The Future of Nursing: Leading Change, Advancing Health" (2010), available at <http://www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx>.
- 11 Ibid.
- 12 HRSA, *The Registered Nurse Population*.
- 13 "Occupational Outlook Handbook, 2010-2011 Edition: Medical Assistants," available at <http://www.bls.gov/oco/ocos164.htm> (last accessed January 2011).
- 14 "Advancing the Allied Health Workforce in California," available at <http://www.futurehealth.ucsf.edu/Public/Center-Research/Home.aspx?pid=88> (last accessed January 2011).
- 15 <http://explorehealthcareers.org/en/home>.
- 16 Jeffrey Passel and D'Vera Cohn, "Immigration to Play Lead Role in Future U.S. Growth: U.S. Population Projections 2005-2050" (Washington: Pew Research Center, 2008), available at <http://pewresearch.org/pubs/729/united-states-population-projections>.
- 17 Carnevale, Smith, and Strohl, "Help Wanted."
- 18 Peter I. Buerhaus, David I. Auerbach, and Douglas O. Staiger, "The Recent Surge in Nurse Employment: Causes and Implications," *Health Affairs* 28 (4) (2009): w657-w668.
- 19 Daniel J. Derksen and Ellen-Marie Whelan, "Closing the Health Care Workforce Gap" (Washington: Center for American Progress, 2010), available at http://www.americanprogress.org/issues/2010/01/health_workforce.html.
- 20 IPEDS Completions, 2008-2009.
- 21 Carnevale, Smith, and Strohl, "Help Wanted."
- 22 IPEDS Completions, 2008-2009.
- 23 Ibid.
- 24 American Association of Colleges of Nursing, "Fact Sheet on Nursing Shortage" (2009) available at <http://www.aacn.nche.edu/Media/FactSheets/Nursing-Shortage> (last accessed January 2011).
- 25 There are some proprietary institutions currently operating offshore medical schools. In fact, there are about 30 such institutions in the Caribbean that cater to students trying to enter U.S. graduate medical education programs. See: T. Samuel Shomaker, "For-Profit Undergraduate Medical Education: Back to the Future?," *Academic Medicine* 8 (2) (2010): 363-369, available at <http://www.medscape.com/viewarticle/716447>.
- 26 Community Colleges Bridges to Opportunity, "Career Pathways Toolkit," available at <http://www.communitycollegecentral.org/careerpathways/careerpathways03272007.pdf>.
- 27 Laura G. Knapp, Janice E. Kelly-Reid, and Scott A. Ginder, "Postsecondary Institutions and Price of Attendance in the United States: Fall 2009, Degrees and Other Awards Conferred: 2008-09, and 12-Month Enrollment: 2008-09" (Washington: National Center for Education Statistics, 2010).
- 28 "Trends in College Spending Online," available at <http://www.tcs-online.org/Home.aspx> (last accessed January 2011).
- 29 "May 2009 National Occupational Employment and Wage Estimates," available at http://www.bls.gov/oes/current/oes_nat.htm#31-0000 (last accessed January 2011).
- 30 Daniel Golden, "How Colleges Are Buying Respect," *BusinessWeek*, March 4, 2010, available at http://www.businessweek.com/magazine/content/10_11/b4170050344129.htm.
- 31 "National League for Nursing Accrediting Commission Standards and Criteria for Associate Degree Programs in Nursing, 2008 Edition," available at http://www.nlnac.org/manuals/SC2008_ASSOCIATE.htm (last accessed January 2011).
- 32 Integrated Postsecondary Education Data System, "Graduation rates of students at the Title IV institution where the students started as full time, first time students, by control of institution, level of institution, degree sought, degree completed, and time to degree, cohort years 2000 and 2004," available at http://nces.ed.gov/das/library/tables_listings/showTable2005.asp?popup=true&tableID=6647&rt=p.
- 33 Ben Miller, "The Truth About CC vs. For-Profit Graduation Rates," *The Quick and the Ed*, October 7, 2010, available at <http://www.quickanded.com/2010/10/the-truth-about-cc-vs-for-profit-graduation-rates.html>.
- 34 Andrew P. Kelly and Mark Schneider, "Filling in the Blanks: How Information Can Affect Choice in Higher Education" (Washington: American Enterprise Institute, 2011), available at <http://www.aei.org/paper/100186>.
- 35 National Science and Mathematics Access to Retain Talent Grant, <http://studentaid.ed.gov/PORTALSWebApp/students/english/SmartGrants.jsp>.

About the authors

Julie Margetta Morgan, J.D., Ph.D., is a Policy Analyst with the Postsecondary Education Program at the Center for American Progress. Prior to joining CAP, she worked as an adjunct faculty member and teaching assistant at Boston College while completing a doctoral program in higher education policy. Dr. Morgan's research and publications focus on how federal law affects educational opportunity and access to higher education. Her interest in these issues stems from her experiences helping low-income students find career opportunities and postsecondary credentials as program coordinator for the Pathways to Success program in New Bedford, Massachusetts.

Julie holds a Ph.D. in higher education from Boston College, a J.D. from Boston College Law School, and a B.A. in philosophy from the College of William and Mary.

Ellen-Marie Whelan, NP, Ph.D., is a Senior Health Policy Analyst and Associate Director of Health Policy at the Center for American Progress. Her research and publications focus on system delivery reform and safety net providers including how we pay providers for delivering care, primary care, health workforce policy, comparative effectiveness research, and prevention. Prior to joining CAP, she was a health policy advisor in the U.S. Senate for five years, health services researcher, and practiced as nurse practitioner for over a decade. She has worked in a variety of primary care settings, started an adolescent primary care clinic in West Philadelphia, and was a faculty member at the University of Pennsylvania and Johns Hopkins University.

Ellen-Marie holds a bachelor's degree from Georgetown University and a master's degree and Ph.D. in nursing and health policy from the University of Pennsylvania and completed a postdoctoral fellowship in primary care policy at the Johns Hopkins School of Public Health.

Acknowledgments

Thank you to those who provided insights and feedback on drafts of this report as well as those who served as peer reviewers. In particular, we would like to thank Louis Soares for his thoughtful comments and his help developing the ideas reflected in the final report. We would also like to thank Mark Schneider for his helpful feedback.

The Center for American Progress is a nonpartisan research and educational institute dedicated to promoting a strong, just and free America that ensures opportunity for all. We believe that Americans are bound together by a common commitment to these values and we aspire to ensure that our national policies reflect these values. We work to find progressive and pragmatic solutions to significant domestic and international problems and develop policy proposals that foster a government that is “of the people, by the people, and for the people.”

