The Role of Mid-Level Providers in Healthcare: Benefits for the Health Care System, Patients, and Financial Implications for Hospitals, Patients and Doctors

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Introduction:

In recent years, mid-level healthcare professionals have grown in significance within the healthcare sector. These healthcare professionals, also known as advanced practice providers, are registered nurses with additional specialized training and education, but they do not hold a medical degree. They are licensed healthcare professionals. The importance of mid-level healthcare providers has increased as healthcare organizations work to improve patient outcomes and cut costs.

This thesis investigates the essential role of mid-level healthcare providers, the benefits they provide for patients and the healthcare system, and their financial impacts on hospitals, patients, and physicians.

Chapter 1: Mid-level Providers, What Is Thier Roles?

nurse specialists and practitioners, physician assistants, and certified registered nurse anesthetists are examples of mid-level providers who are crucial to the healthcare system. Despite receiving more advanced training and education than a registered nurse, these licensed healthcare workers are not doctors. As the need for healthcare services rises, their positions in this sector are becoming more important. (1) Nurse practitioners, for instance, are qualified to diagnose and treat patients because they have completed advanced education and clinical training. There are more than 325,000 licensed nurse practitioners in the United States, according to the American Association of Nurse Practitioners (AANP) (AANP, 2021). Physician assistants, who work under the supervision of a physician, can perform many of the same tasks as a physician, such as diagnosing and treating patients. The National Commission on Certification of Physician Assistants reports that there are over 145,000 certified physician assistants in the United States (NCCPA, 2021). Clinical nurse specialists, who have advanced education and clinical training in a specific area of nursing, such as oncology or pediatrics, are estimated to be over 72,000 in the United States (AACN, 2021). Finally, certified registered nurse anesthetists provide anesthesia services and are estimated to be over 57,000 in the United States (AANA, 2021).(2)

Other examples of mid-level providers include:

- Certified Nurse Midwives: Licensed healthcare professionals who provide prenatal care, labor and delivery, and postpartum care to women.
- Clinical Social Workers: Licensed healthcare professionals who provide mental health services, such as psychotherapy, to individuals, couples, and families.

- Dental Hygienists: Licensed healthcare professionals who provide preventive dental care, such as cleaning teeth and examining patients for signs of oral diseases.
- Optometrists: Licensed healthcare professionals who provide vision care, such as
 prescribing eyeglasses and contact lenses, diagnosing and treating vision problems, and
 detecting eye diseases.

The following is a concise explanation of the roles of mid-level providers:

Nurse Practitioners (NPs): NPs are registered nurses who have obtained further education and training at the master's or doctoral level. They have the license to diagnose and treat common illnesses, prescribe medications, and order diagnostic tests such as X-rays or blood work. NPs provide preventive care and counseling to help patients maintain their health.

Physician Assistants (PAs): PAs are healthcare professionals who work under the supervision of a licensed physician. They diagnose and treat illnesses, prescribe medications, and order diagnostic tests. PAs are also qualified to perform specific medical procedures such as suturing wounds or setting fractures. They work in various healthcare settings such as hospitals, clinics, and physician offices.

Clinical Nurse Specialists (CNSs): CNSs are registered nurses who have undergone specialized education and training in a particular area of nursing, such as pediatrics, oncology, or critical care. They are professionals in their field and collaborate with patients, families, and other healthcare providers to deliver specialized care. CNSs may also establish and implement new healthcare policies and procedures to enhance patient outcomes.

Certified Registered Nurse Anesthetists (CRNAs): CRNAs are registered nurses who have undergone advanced education and training in anesthesia. They work with patients before, during, and after surgery to ensure their safety and comfort. CRNAs administer anesthesia, monitor patients' vital signs, and adjust the level of anesthesia as needed. They work in various healthcare settings such as hospitals, surgery centers, and dental offices.

Chapter 2: Benefits of Mid-Level Providers for the Healthcare System

Mid-level providers offer numerous benefits for the healthcare system. One of the most significant benefits is increased access to care. As the demand for healthcare services increases, there is a shortage of primary care physicians, making it difficult for patients to access care. Mid-level providers can help fill this gap by providing primary care services and reducing wait times for patients. According to the AANP, over 83% of nurse practitioners deliver primary care services, and 78% are accepting Medicare and Medicaid patients (AANP, 2021).

Additionally, mid-level providers can improve patient outcomes. Studies have shown that patients who receive care from mid-level providers have similar outcomes to those who receive care from physicians. A systematic review of studies conducted by the Agency for Healthcare Research and Quality found that nurse practitioners and physician assistants provide care that is comparable in quality to that of physicians, including patient outcomes (AHRQ, 2014). Mid-level providers can also provide patient-centered care that is focused on the individual needs of each patient. This type of care can improve patient satisfaction and lead to better health outcomes. (3)

Finally, mid-level providers can reduce costs. They typically receive lower salaries than physicians, making them a more cost-effective option for healthcare organizations. Additionally, mid-level providers can help to reduce the overall cost of care by providing preventative services and reducing the need for more expensive procedures.

One example of the financial benefits of utilizing mid-level providers in healthcare organizations is a study by the National Governors Association (NGA) in the United States. The NGA estimated that using nurse practitioners to provide primary care services could save the US up to \$4.2 billion annually. This estimate is based on the fact that nurse practitioners typically receive lower salaries than physicians and can provide preventative services, which can reduce the need.

Another example is a study by the RAND Corporation, which found that substituting physician assistants and nurse practitioners for physicians in primary care could save the US healthcare system up to \$15.5 billion annually. This estimate is based on the lower salaries of mid-level providers, as well as their ability to provide similar quality care to that of physicians.

These studies provide statistical evidence that utilizing mid-level providers can have financial benefits for healthcare organizations. (4)

The table presented displays the average salaries of selected healthcare service personnel. It can be used as a tool to compare and contrast the average salaries across different roles in the healthcare industry.

Occupation code	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Median hourly wage	Mean hourly wage	Annual mean wage	Mean wage RSE
29-1141	Registered Nurses	detail	3,047,530	0.2%	21.631	\$37.31	\$39.78	\$82,750	0.2%
29-1151	Nurse Anesthetists	detail	43,950	4.7%	0.312	\$94.04	\$97.34	\$202,470	1.1%
29-1161	Nurse Midwives	detail	7,750	5.7%	0.055	\$54.24	\$54.91	\$114,210	2.0%
29-1171	Nurse Practitioners	detail	234,690	1.3%	1.666	\$58.02	\$56.75	\$118,040	0.4%
31-1131	Nursing Assistants	detail	1,314,830	0.5%	9.333	\$14.57	\$15.99	\$33,250	0.2%
29-1210	Physicians	broad	641,380	1.0%	4.552	<u>(5)</u>	\$121.38	\$252,480	0.6%
31-1130	Nursing Assistants, Orderlies, and Psychiatric Aides	broad	1,399,130	0.5%	9.931	\$14.56	\$16.01	\$33,290	0.2%
31-1133	Psychiatric Aides	detail	39,140	2.5%	0.278	\$14.55	\$16.65	\$34,640	0.6%
31-2000	Occupational Therapy and Physical Therapist Assistants and Aides	minor	181,410	1.2%	1.288	\$27.87	\$25.91	\$53,900	0.7%
31-2010	Occupational Therapy Assistants and Aides	broad	45,350	2.4%	0.322	\$29.58	\$29.69	\$61,760	0.7%
31-2011	Occupational Therapy Assistants	detail	41,980	2.6%	0.298	\$29.68	\$30.56	\$63,560	0.6%
31-2012	Occupational Therapy Aides	detail	3,370	7.8%	0.024	\$16.14	\$18.86	\$39,230	3.4%
31-2020	Physical Therapist Assistants and Aides	broad	136,050	1.4%	0.966	\$23.64	\$24.65	\$51,280	0.9%
31-2021	Physical Therapist Assistants	detail	93,660	1.7%	0.665	\$29.42	\$29.20	\$60,740	0.7%
31-9091	Dental Assistants	detail	347,170	1.2%	2.464	\$18.59	\$20.44	\$42,510	0.5%
31-9092	Medical Assistants	detail	727,760	0.8%	5.166	\$17.88	\$18.36	\$38,190	0.3%

Chapter 3: Benefits of Mid-Level Providers for Patients

Mid-level providers also offer numerous benefits for patients. One of the most significant benefits is increased access to care. Patients who live in rural or underserved areas may have difficulty accessing care due to a shortage of healthcare providers. Mid-level providers can help to fill this gap by providing care in these areas. According to the National Rural Health Association, over 50% of physician assistants and nurse practitioners work in rural or underserved areas (NRHA, 2021).

Additionally, mid-level providers can provide continuity of care. Patients who receive care from mid-level providers often have the same provider for multiple visits, leading to acontinuity of care that can improve patient outcomes and satisfaction. Mid-level providers also tend to spend more time with patients than physicians, allowing them to develop a stronger patient-provider relationship and address the patient's needs more comprehensively. This type of care can lead to

better communication and collaboration between patients and providers, resulting in improved health outcomes. (5)

Mid-level providers also offer cost savings for patients. As mentioned previously, mid-level providers tend to receive lower salaries than physicians, making their services more affordable. Additionally, mid-level providers can provide preventative services and early interventions that can help to reduce the need for more expensive procedures in the future. According to a study conducted by the University of Michigan, patients who received care from nurse practitioners had 29% lower healthcare costs compared to those who received care from physicians. This indicates that using mid-level providers such as nurse practitioners can be more cost-effective for patients compared to using physicians. However, it is important to note that the cost savings may vary depending on the specific healthcare services required by the patient and the location of the healthcare organization. (6)

Mid-level healthcare providers, such as nurse practitioners and physician assistants, have the ability to offer a diverse range of primary care services that traditionally are provided by physicians to patients. Such services may include:

- 1. Conducting physical exams
- 2. Taking medical histories
- 3. Ordering and interpreting diagnostic tests
- 4. Diagnosing and treating acute and chronic illnesses
- 5. Prescribing medications
- 6. Providing preventative care, such as vaccinations and cancer screenings
- 7. Managing chronic conditions, such as diabetes and hypertension
- 8. Providing patient education on disease prevention and management
- 9. Performing minor surgical procedures, such as suturing wounds and removing skin lesions
- 10. Referring patients to specialists, if necessary.

It's important to note that the scope of practice for mid-level providers may vary depending on state laws and regulations. Some states may allow nurse practitioners and physician assistants to have more autonomy and take on additional responsibilities, while others may require more supervision and collaboration with physicians. (7)

Chapter 4: Benefits of Mid-Level Providers for physicians

Utilizing mid-level providers, such as nurse practitioners and physician assistants, can offer several benefits for physicians. First and foremost, using mid-level providers can help to alleviate the workload of physicians, allowing them to focus on more complex cases and providing better care for their patients. This can lead to improved job satisfaction and a better work-life balance for physicians.

In addition to reducing the workload of physicians, mid-level providers can also improve the efficiency of healthcare practices. Since mid-level providers can perform many of the same tasks as physicians, they can help to increase the overall productivity of the practice. This can lead to cost savings, improved patient outcomes, and increased revenue for physicians.

Furthermore, mid-level providers can provide additional expertise in areas that physicians may not specialize in. For example, nurse practitioners may have specialized training in primary care or geriatrics, allowing them to provide specialized care in these areas. This can lead to better patient outcomes and improved patient satisfaction.

Finally, utilizing mid-level providers can help to expand the scope of services offered by healthcare practices. This can help to attract more patients and expand the patient base of the practice, ultimately leading to increased revenue for physicians.

Overall, utilizing mid-level providers can offer numerous benefits for physicians, including reduced workload, improved efficiency, increased expertise, and expanded services.

Chapter 5: Financial Benefits of Mid-Level Providers for Hospitals, Providers and insurance companies

Mid-level providers can offer financial benefits for hospitals and providers. For example, using mid-level providers can help to reduce the cost of healthcare services. This is because mid-level providers tend to have lower salaries than physicians, making them a more cost-effective option for healthcare organizations. Additionally, mid-level providers can help to reduce the need for expensive procedures by providing preventative services and early interventions. This can help to reduce the overall cost of care for both patients and healthcare organizations.

Using mid-level providers can also improve efficiency and productivity. Since mid-level providers can perform many of the same tasks as physicians, they can help to reduce the workload of physicians, allowing them to focus on more complex cases. This can help to increase the efficiency and productivity of healthcare organizations, leading to cost savings and improved patient outcomes. According to a study conducted by the American Hospital Association, hospitals that use mid-level providers have lower patient readmission rates and shorter lengths of stay compared to those that do not (AHA, 2015).

Finally, using mid-level providers can help to increase revenue for healthcare organizations. This is because mid-level providers can provide additional services and bill for these services, generating more revenue for the organization. Additionally, mid-level providers can help to increase patient volume by providing additional services and improving access to care. This can lead to increased revenue for the organization.

Chapter 6: Financial Benefits of Mid-Level Providers for insurance companies

The use of mid-level providers, such as nurse practitioners and physician assistants, can offer several benefits for insurance companies. One of the most significant benefits is cost savings. Mid-level providers typically have lower salaries than physicians, which can make their services a more cost-effective option for insurance companies. By utilizing mid-level providers, insurance companies can help to reduce the cost of healthcare services, which can ultimately lead to lower premiums for policyholders.

Another benefit of using mid-level providers is increased access to care. Patients in underserved or rural areas may have difficulty accessing care due to a shortage of healthcare providers. Mid-level providers can help to fill this gap by providing care in these areas. This can help insurance companies to ensure that their policyholders have access to the care they need, regardless of their location.

Mid-level providers can also provide high-quality care to patients. They are trained to perform many of the same tasks as physicians and can provide a wide range of primary care services to patients. This can help to improve patient outcomes and satisfaction, which can lead to higher retention rates for insurance companies.

Finally, using mid-level providers can help to improve the efficiency of healthcare services. Mid-level providers can perform many of the same tasks as physicians, which can help to reduce the workload of physicians and improve the overall efficiency of healthcare organizations. This can lead to cost savings for insurance companies and improved patient outcomes.

In summary, the use of mid-level providers can offer several benefits for insurance companies, including cost savings, increased access to care, high-quality care, and improved efficiency of healthcare services. By utilizing mid-level providers, insurance companies can help to ensure that their policyholders receive the care they need while also managing costs and improving the overall quality of healthcare services.

Here are a few statistics supporting the benefits of using mid-level providers for insurance companies:

- 1. According to a study by the National Governors Association, using nurse practitioners to provide primary care services could save the United States up to \$4.2 billion annually (NGA, 2012).
- 2. A study conducted by the University of Michigan found that patients who received care from nurse practitioners had 29% lower healthcare costs compared to those who received care from physicians (University of Michigan, 2018).
- 3. In a survey conducted by the American Academy of Physician Assistants, it was found that 86% of physician assistants reported that they helped to improve patient outcomes while reducing healthcare costs (AAPA, 2020).

4. Another study by the American Hospital Association found that hospitals that use midlevel providers have lower patient readmission rates and shorter lengths of stay compared to those that do not (AHA, 2015).

These statistics suggest that using mid-level providers can lead to significant cost savings for insurance companies while also improving patient outcomes.

Chapter 7: The potential risks associated with utilizing midlevel providers in lieu of physicians and the reasons for refuting this viewpoint will be discussed.

The utilization of midlevel providers, such as nurse practitioners and physician assistants, has become increasingly common in healthcare settings. While midlevel providers offer several benefits, there are also potential risks associated with utilizing them in lieu of physicians. This chapter will discuss the potential risks and the reasons for refuting the viewpoint that midlevel providers cannot replace physicians.

One of the primary risks associated with utilizing midlevel providers in lieu of physicians is the potential for misdiagnosis or missed diagnoses. Physicians have significantly more training and education compared to midlevel providers, which enables them to diagnose complex cases more accurately. Additionally, physicians have the ability to order and interpret diagnostic tests that midlevel providers cannot perform. A misdiagnosis or missed diagnosis can lead to delayed treatment, which can result in worsened patient outcomes.

Another potential risk of utilizing midlevel providers is the lack of continuity of care. Patients who see midlevel providers may not see the same provider consistently, which can lead to fragmented care. In contrast, patients who see a physician consistently are more likely to receive coordinated and comprehensive care. This can lead to improved patient outcomes and satisfaction.

Additionally, utilizing midlevel providers in lieu of physicians may lead to a lack of specialization. Physicians are trained to specialize in specific areas of medicine, such as cardiology or neurology. Midlevel providers do not have the same level of specialization, which can lead to missed diagnoses and mismanagement of complex cases.

Despite these potential risks, there are several reasons to refute the viewpoint that midlevel providers cannot replace physicians. For example, midlevel providers can provide increased access to care, particularly in rural or underserved areas where there may be a shortage of physicians. Additionally, midlevel providers can provide cost savings for both patients and healthcare organizations.

Ultimately, while there are potential risks associated with utilizing midlevel providers in lieu of physicians, it is important to recognize that midlevel providers can offer many benefits as well.

By working collaboratively with physicians and utilizing their unique skillsets, midlevel providers can play a vital role in improving access to care and reducing healthcare costs. It is essential to strike a balance between utilizing midlevel providers effectively while also ensuring that patients receive high-quality and comprehensive care. (9)

Chapter 8: Conclusion

In conclusion, mid-level providers play essential roles in healthcare, offering numerous benefits for the healthcare system, patients, and providers. They can help to improve access to care, reduce costs, improve patient outcomes and satisfaction, and increase efficiency and productivity. Using mid-level providers can also help to increase revenue for healthcare organizations. As the demand for healthcare services continues to increase, mid-level providers will become even more critical in providing high-quality, cost-effective care to patients. Furthermore, the shortage of physicians in many areas makes mid-level providers even more valuable, as they can help to fill the gaps in healthcare services. According to the National Center for Health Workforce Analysis, there will be a shortage of between 21,100 and 55,200 primary care physicians by 2032 (HRSA, 2019). This shortage highlights the importance of mid-level providers in meeting the increasing demand for healthcare services, particularly in primary care.

However, there are some challenges that need to be addressed to fully realize the benefits of midlevel providers. One of the main challenges is the lack of consistent regulations and policies across states regarding the scope of practice of mid-level providers. In some states, mid-level providers have greater autonomy, while in others, their scope of practice is more limited. This inconsistency can create confusion for healthcare organizations and limit the ability of mid-level providers to provide comprehensive care.

Another challenge is the lack of understanding and acceptance of mid-level providers among some patients and physicians. Some patients may prefer to see physicians over mid-level providers, while some physicians may be hesitant to delegate tasks to mid-level providers. Addressing these challenges will require education and collaboration among healthcare stakeholders to ensure that mid-level providers are fully integrated into the healthcare system and recognized as valuable members of the healthcare team.

In conclusion, mid-level providers have an essential role to play in healthcare, offering numerous benefits for patients, healthcare organizations, and providers. Their ability to provide high-quality, cost-effective care makes them a valuable asset in meeting the increasing demand for healthcare services, particularly in primary care. Addressing the challenges that exist in integrating mid-level providers into the healthcare system will be crucial in realizing the full potential of these providers and ensuring that patients receive the best possible care.

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