Cost-Effectiveness of Nurse Practitioner Care
By Mary Elizabeth Fund, MSN, NP, and Ann Swanson-Hill, MSN, NP

Identification of Issue
Primary care delivery is going through major changes to increase capacity to deliver quality cost-effective care. By 2015, it is predicted, primary care will be provided by providers other than physicians including nurse practitioners (NPs) (Poghosyan, Lucero, Rauch, & Berkowitz, 2012). NPs are increasingly recognized as an underutilized resource for health care reform. With health care spending out of control, many efforts to solve the problem have focused on applying proven principles of evidence-based practice and cost-effectiveness to find the least expensive way to produce a specific clinical service of acceptable quality (Bauer, 2010). The purpose of this article is to present consistent evidence that NPs provide health care of equal or better quality at lower cost than comparable services provided by other qualified health professionals.

Background Information/Review of Literature
Sound economic analysis and strong evidence show that the costs of producing care can be reduced by allowing the substitution of NPs for more expensive health professionals without diminishing quality in the process (Bauer, 2010). Money that could be reallocated to meeting reform goals is being wasted as long as rules and regulations hinder full utilization of less expensive, equally qualified NPs (Bauer, 2010). With a predicted shortage of primary care providers as the population grows and as millions of Americans become newly insured with the Affordable Care Act, one proposed solution is to expand the role of nurse practitioners in many more areas of the country, and to allow them to provide a wider range of preventive and acute health care services (Health Policy Brief, 2012). There are also considerations at the federal level that bear on NPs ability to be reimbursed for the care that they provide. NPs in the state of Kansas are directly affected by state regulations limiting scope of practice and are reimbursed at a lower rate than physicians for same services provided.

For over 30 years NPs have provided high-quality, cost-effective care according to the National Nursing Centers Consortium (NNCC) (2011). Dating back to 1981, The Office of Technology Assessment determined that NPs performed comparable medical care tasks at a lower total cost than physicians (LeRoy & Solkowitz, 1981). This cost-effective care continues in today’s health care market. NPs have now expanded their roles to provide services in many different settings such as retail clinics, urgent care centers, worksite clinics, emergency rooms, hospitals, and others. The NNCC has documented cost savings with quality care in all of these settings. “No matter what setting, nurse practitioner care has proven to be a high-quality, cost-effective means of primary care delivery” (NNCC, 2011).

Key Elements, Challenges, Barriers, Opportunities for Cost-Effectiveness of NP Care
The key elements are cost-effectiveness of NP care, quality of care provided by NPs, and patient outcomes of care provided by NPs as compared to physician care. A study by Chenoweth, Martin, Pankowski, and Raymond (2008) analyzed health care costs of providing on-site NP services for over 4,000 employees and their dependents, finding savings of over a million dollars with a benefit-to-cost ratio of up to 15 to 1. A comparative study
of nursing home resident outcomes between care provided by NP/physicians versus physicians-only concluded the level of care given for patients by the two groups of providers was basically the same and of similar quality (Aigner, Drew & Phipps, 2004). The NP/physician group patients were seen more often and increased visits by NPs were assumed to result in time and cost savings for physicians and improved access to care for patients.

Patients perceive that receiving primary care and having a usual source of care is more important than who it was that provided these services (Health Policy Brief, 2012). Studies comparing the quality of care provided by physicians and NPs have found that clinical outcomes are similar. A systematic review of 26 studies published since 2000 found that health status, treatment practices, and prescribing behavior were consistent between NPs and physicians. The review concluded that nurse-led care was as effective as doctor-led care and associated with higher levels of patient satisfaction and compliance, longer consultations, and higher rates of laboratory tests (Laurant et al., 2004). This review is currently being updated and will explore factors affecting the implementation of initiatives to substitute doctors with nurses in primary care (Rashidian et al., 2013). The patient-centered nature of NP training, which often includes care coordination and sensitivity to the impact on health of social and cultural factors such as environment and family situation, makes NPs particularly well prepared for and interested in providing quality primary care at a lower overall cost.

Identified challenges and barriers to NPs providing cost-effective patient care include policies and regulations restricting scope of practice, inequitable reimbursement of NP services by Medicare, Medicaid, and private insurance companies, and managed care plans that do not recognize NPs as primary care providers. Practice, policy, and research recommendations for better utilization of NPs in primary care will help overcome these challenges and barriers to providing cost-effective primary care.

NP authority to practice varies significantly among states. In 2012, 18 states and the District of Columbia allowed NPs to diagnose and treat patients and prescribe medications without a physician’s involvement, while 32 states required physician involvement to diagnose and treat or prescribe medications, or both (Health Policy Brief, 2012). Kansas currently requires NPs to complete an annual signed collaborative agreement with a physician to diagnose, treat, and prescribe medications which restricts the ability to practice independently and to the full scope of the NPs education. The Kansas APRN Task Force has worked tirelessly to promote expanded advanced practice roles in Kansas since 2009 through legislative changes. Proposed legislative changes for 2014 include: a) removal of mandate that requires collaborative practice agreement and physician signed protocols to prescribe medicine, b) malpractice insurance will be mandatory for all APRNs, c) transition to practice time period for graduate APRNs to practice with a collaborating physician or APRN, and d) APRNs will be required to be nationally certified.

Bauer (2010) believes the costs of American health care could be reduced immediately. A change in the regulations and policies is needed so that reimbursement for services at a lower cost from NPs as licensed independent health practitioners could be initiated rather than only reimbursing higher cost health professionals for services. This change would allow NPs to practice independently and to the full scope of their education resulting in cost savings.

The key principle of economic science, identifying the least expensive way to produce a specified outcome, is a necessary foundation for any meaningful health reform. Cost-effective analysis clearly supports reversing rules and regulations that
deny reimbursement to nurse practitioners while paying more expensive health professionals for clinical services that achieve comparable results. Overall costs of medical care are held at unnecessarily high levels by policies that prevent substituting NPs for physicians in areas that demonstrate equal outcomes of care by NPs versus physicians. The appropriate measure for cost-effectiveness analysis is the cost of different labor inputs for producing the same service. As many studies have shown, the cost-reduction imperative of health reform can be met while eliminating policies that reimburse physicians while inhibiting the use of NPs to provide services within their scopes of practice (Bauer, 2010).

Implications/Conclusions
A fundamental concept of economics, input substitution, can be immediately applied to accomplish the goals of healthcare reform. Policies that constrain appropriate input substitution need to be changed as soon as possible. The Institute of Medicine (IOM) noted in their 2010 report, The Future of Nursing: Leading Change, Advancing Health, that state scope of practice laws, and not education and training, dictate the services that NPs are allowed to perform. The IOM recommended that state legislatures reform practice laws and regulations to allow for full scope of practice and require fee-for-service plans within the state to similarly cover NP services (Institute of Medicine, 2010). The IOM also recommended that Congress change the Medicare law to make coverage of NP services consistent with coverage on physician services. Additional IOM recommendations include: a) NPs should be full partners with physicians and other health care professionals in redesigning health care in the United States, and b) effective workforce planning and policy making require better data collection and information infrastructure. NPs in Kansas can promote these recommendations by being active leaders in the Kansas Action Coalition (KAC). State action coalitions have been launched in all 50 states and have set goals to effect long-term changes at the local, state, and regional levels. In June 2011, the KAC was founded with the focus to guide implementation of the IOM recommendations. These recommendations would go a long way to advance the NPs ability to provide both quality and cost-effective care to primary care patients.

NPs are a proven response to the evolving trend towards wellness and preventive health care driven by consumer demand. A solid body of evidence demonstrates that NPs have consistently proven to be cost-effective providers of high-quality care for almost 50 years (AANP, 2013). Utilizing the NP workforce to its fullest capacity is critical to meeting the increased demand for primary care. Uniform NP laws and regulations that enable NPs to practice without restrictions are necessary for consistent quality cost-effective care.

References


Institute of Medicine. (2010). The future continued on page 15
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structure of nursing: Leading change, advancing health.


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