Quality and Safety Working Group Report: Analysis of Existing Strengths, Critical Gaps, and Opportunities for Collaboration

May 2014

Analysis

Given the broad mandate provided to this working group and the recent integration of Legacy Rutgers and Legacy UMDNJ, it is not surprising that a number of these areas of strength are relatively isolated from each other. The majority of schools in RBHS have contributed through research and publications, as well as educational and clinical innovations. Highlighted below are examples of research and publications that exemplify strengths under each of the cores. It is important to note that this is only a snapshot of the grants and publications as data was difficult to obtain across schools. Also some of these grants could fit across multiple cores.

Funding has been received from multiple sources across disciplines:

- NIH including NCI, NIMH, NIDDK, NHLBI, etc.
- Additionally, major funding has been received from CMS, AHRQ, the RWJ Foundation, among other non-NIH sources.
- Significantly opportunities from non-NIH funders include:
    - National-PCORI, CMS, HRSA, AHRQ, professional organizations, William Hearst Foundation, American Institute for Research, US Department of Justice, etc.
    - State-RWJF, Healthcare Foundation of NJ., Nicholson Foundation, Central Jersey Family, NJDOBI , Fannie Rippel Foundation
    - Industry-Medline, Horizon Foundation, J&J

Core I. Research

The research core demonstrates strong quantitative and qualitative assessment strength and a beginning data warehouse capability. This core includes the Institute for Health, Health Care Policy and Aging Research and the Center for State Health Policy which has national recognition and significant funding. The Department of Family Medicine and Community Health is internationally recognized for expertise in qualitative and mixed-methods research, particularly in the area of organizational change. The School of Pharmacy has been funded with multiple R01 to support drug evaluations.

Representative Grants (Research Grants in FY13-14 approximately $7M)

Crabtree, BF. Integrating Practice & Community Cancer Control, NCI ($679,745)

Crabtree, BF. PCMH Implementation Strategies: Implications for Cancer Survivor Care, NCI ($651,526 Year 1)

Hudson, SV. Extended Cancer Education for Longer-term Survivors (EXCELS) in Primary Care, NCI ($641,708 Year 1)

Crystal, S. Center for Education and Research on Mental Health Therapeutics, AHRQ ($1,898,682)

Yedidia M. Impact on Environmental Changes on Children's BMI NIH ($651,442 Year 1)

Representative Publications

Akincigil, A., et al. (2012). Racial and ethnic disparities in depression care in community-dwelling elderly in the United States. *American journal of public health*, *102*(2), 319-328.

Crabtree, B. F., et al. (2010). Summary of the National Demonstration Project and recommendations for the patient-centered medical home. *The Annals of Family Medicine*, *8*(Suppl 1), S80-S90.

Crabtree BF, et al. (2011) Evaluation of Patient Centered Medical Home Transformation Initiatives. Medical Care, 49(1): 10-16, 2011.

Olfson, M., Crystal, S. et al. (2010). Trends in antipsychotic drug use by very young, privately insured children. *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*(1), 13-23.

Ferrante, J. M.,et al. (2010). Principles of the patient-centered medical home and preventive services delivery. *The Annals of Family Medicine*, *8*(2), 108-116.

Hudson, S. V. et al. (2012). Adult cancer survivors discuss follow-up in primary care:'not what I want, but maybe what I need'. *The Annals of Family Medicine*, *10*(5), 418-427.

Hudson, S. V., et al. (2012). Cancer survivors and the patient-centered medical home. *Translational behavioral medicine*, *2*(3), 322-331.

Core II. Policy Core

The Institute for Health, Health Care Policy and Aging Research is internationally recognized for its excellence in health services research and its capacity to conduct policy analyses and financial studies. Housed within the Institute is the Center for State Health Policy which has had major impacts on health policy in New Jersey and has garnered considerable extramural funding. With the integration of findings from clinical and workforce innovations, the Policy Core will have even greater capacity to impact on policy and provide policy feedback on innovations in healthcare financial modeling.

Representative Grants (Grants in FY13-14 exceed $7M)

Cantor J. Sound and Creative Health Policy in NJ. RWJF ($1,524,656)

Cantor J. Evaluation of AF4Q Super Users Project. RWJF ($245,208)

Crystal S. Accelerating Utilization of Comparative Effectiveness Findings in Medicaid Mental Health ($1,634,660)

Crystal S. Adult Medicaid quality Grants: Measuring and Improving Quality of Care, Missouri Dept of Social Services ($275,000)

Delia, D. Comparative Effectiveness of Pre-hospital and Hospital Emergency Care, AHRQ ($345,637)

Representative Publications

Cantor, J. C**.,** Monheit, A. C., DeLia, D., & Lloyd, K. (2012). Early impact of the Affordable Care Act on health insurance coverage of young adults. *Health services research*, *47*(5), 1773-1790.

DeLia, D., Cantor, J. C., Brownlee, S.,et al. (2012). Patient Preference for Emergency Care Can and Should It Be Changed?. *Medical Care Research and Review*, *69*(3), 277-293.

Gerhard, T., et al ... & Crystal, S. (2013). Comparative mortality risks of antipsychotic medications in community-dwelling older adults. *The British Journal of Psychiatry*, bjp-bp.

Hempstead, K., DeLia, D., Cantor**,** et al. (2014). The Fragmentation of Hospital Use Among a Cohort of High Utilizers: Implications for Emerging Care Coordination Strategies for Patients With Multiple Chronic Conditions. *Medical care*, *52*, S67-S74.

Lucas, J. A., et al… & Crystal, S. (2014). Antipsychotic medication use in nursing homes: a proposed measure of quality. *International journal of geriatric psychiatry*.

Nutting, P. A., Crabtree, B. F**.,** et al. (2011). Transforming physician practices to patient-centered medical homes: lessons from the national demonstration project. *Health affairs*, *30*(3), 439-445.

Core III. Clinical Practice Core

The Clinical Practice Core focuses on enhancing access, quality and cost of healthcare within communities, while also accounting for the social determinants of health. RBHS investigators conduct a range of innovative clinical interventions on care delivery models such as Accountable Care Organizations (ACOs), Patient-Centered Medical Homes (PCMHs), advanced FQHCs, long-term care facilities, and Group Practice Plans focused on the Medicaid population. The Department of Family Medicine and Community Health at RWJMS has collaborations with multiple departments on quality of care in primary care settings and ACOs, including the integration of behavioral health and expanding capacity for long-term cancer survivors. Investigators at the NJMS are experimenting with Multi-Professional care models, while others are working with Ryan White Centers. A nurse-led clinic focused on interprofessional care for improving patient and community outcomes includes the schools of social work, business school and nursing. Nursing has the capacity to grow with the merger of the two schools that bring different strengths as evidenced by the grants from multiple foundations and national grant offices. In addition various Centers provide support for quality and safety. The Center for Health Services Research on Pharmacotherapy, Chronic Disease Management, and Outcomes has had a particular focus on prescription drug use and the translation to various populations.

Representative Grants (Grants in FY14 exceed $28M across 49 programs)

Over $6M in clinical grant funds support (n=10) programs dedicated to HIV/AIDS care and prevention.

School of Pharmacy over $6 million in grants related to drug effectiveness/clinical trials.

Sickora, C. SON: Jordan Harris Community Center. HRSA ($667,000)

Willard, S. CON: ICPM for Improved Patient and Community Outcomes in an Urban Setting. HRSA ($500,000),

Representative Publications

Crabtree, B. F**.**et al. (2011). Primary care practice transformation is hard work: insights from a 15-year developmental program of research. *Medical Care*, *49*(Suppl), S28.

Parikh A, et al. The effectiveness of outpatient appointment reminder systems in reducing no-show rates. Am J Med. 2010 Jun;123(6):542-8.

Pierce DN. Primary care in the ED -Why? Nurs Manage. 2009 Sep;40(9):23-27, 51.

Rao B, et al. Telemedicine: current status in developed and developing countries. J Drugs Dermatol. 2009 Apr;8(4):371-5. Review.

Williams JM, et al. Partnership between tobacco control programs and offices of mental health needed to reduce smoking rates in the United States. JAMA Psychiatry. 2013 Dec;70(12):1261-2.

Stevinson K, et al. Cost effectiveness analysis of the New Jersey rapid testing algorithm for HIV testing in publicly funded testing sites. J Clin Virol. 2011 Dec;52 Suppl 1:S29-33.

Spagnolo AB, et al. A study of the perceived barriers to the implementation of circles of support. Psychiatr Rehabil J. 2011 Winter;34(3):233-42.

Core IV. Education Core for Workforce Innovation

The Education Core for Workforce Innovation focuses on defining and educating the future workforce as well as team-based initiatives. This core has varied levels of engagement across schools, however, has become a focus of many schools, centers and departments. The key focus has been on workforce re-design in the community and in education of the workforce in population based care. The use of patient navigators to help patients navigate the system has been implemented with patients who need mammography in minorities. This role has been translated to other groups. Interprofessional team based work is evidenced in several grants below.

Representative Grants (Grants in FY14 exceed $26 million)

Center for Health Care Policy. Sustaining High-Utilization Team Model-PA, CO, MO, CA. ($14 million over several years).

Clarke, E. Using Systems Engineering Analyses to Optimize Workforce Redesign. NJHI ($150,000).

Cadmus, E. & Salmond, S. Transitions into Practice for New Nurses in Long Term Care. CMS ($1.6million over 30 months)

Cadmus, E. & Salmond, S. Academic Practice Partnership for Nursing Education. RWJF ($150,000 over 2 years).

Salmond & Kamienski, M. NJNI: so a Nurse Will Be There for You. RWJF. ($2.3 million)

Turner, B. & Cadmus, E. Population Care Coordinator Training. HHI ($300,000 over 2 years) Rutgers sub-contract with Duke University.

Willard, S. Preparing NPs to Care for HIV in an Urban & Inner City Population. HRSA ($300,000).

Representative Publications

Friedman A, Hahn K, Etz R, Rehwinkel A, Miller WL, Nutting PA, Jaen CR, Shaw EK, Crabtree BF. A typology of primary care workforce innovations in the United States since 2000. Medical Care, 52(2): 101-111, 2014.

Pletcher BA, et al. Primary care pediatricians' satisfaction with subspecialty care, perceived supply, and barriers to care. J Pediatr. 2010 Jun;156(6):1011-5, 1015.

Cadmus, E. et al. (2013). Measuring first-line nurse manager work: Instrument: Development and testing. JONA. 43(12): 673-679.

Cadmus, E. et al (2013). Ever-evolving: Population care coordinators. Nursing Management. 44(12): 9-11.

Gaps

1) Senior faculty are extremely successful and overcommitted, so there is an urgent need to recruit junior and mid-level faculty that can be mentored by senior faculty to take on critical components of this program.
2) The current system is extremely inefficient for grants submission and grants management and lacks an environment that fosters and supports research such as incentives, pre-post grant management, and work balance.
3) There is not currently an infrastructure to bring together collaborators from across schools and departments, so a Center or Institute could create a space for interaction and development of collaborations. In fact, current incentives and structures specifically inhibit collaboration across schools and departments.
4) There are no identified leaders to bring together the collaborations or run a Center or Institute.
5) RBHS uses different systems to obtain data and lacks of a central repository to tap into large data sets.

Opportunities for Collaboration

There are multiple schools and institutes that have an opportunity to collaborate within this signature program. These include all of the schools and centers housed under RBHS. There are multiple schools that are educating different professional disciplines within the healthcare workforce; however, these tend to work in silos and have limited opportunities to share or collaborate. They also tend to be isolated in the types of clinical areas where they practice. So creating these 4 interdependent cores and having multiple schools and departments participate in these cores will help increase knowledge sharing and project development. Another opportunity for collaboration emerges from the myriad innovative clinical interventions that have not been adequately researched. There is a tremendous opportunities for experienced investigators in process and outcomes research work to collaborate with clinical innovators. Furthermore, policy analysts rarely have the opportunity to engage practitioners at the ground level where healthcare policy interventions are being implemented. Thus by creating a collaborative feedback loops between policy analysts, researchers, educators, and clinical innovators healthcare can be transformed and enhance the potential to improve access, quality and reduced cost to the citizens of NJ. As clinical innovators and researcher interact they will be able to provide feedback to those designing the educational programs for future healthcare professionals. Since inter-professional education/programs are key to success of this signature program there are multiple opportunities for collaboration with the Vice Chancellor for Inter-Professional Programs.

There are also tremendous opportunities for collaboration of RBHS and other Rutgers schools and departments. For example, the School for Management and Labor Relations has an interest and expertise in workforce management and the Heldrich Center for Workforce Development evaluates workforce needs and makes recommendations. Other departments within Rutgers such as Communications, Anthropology, Sociology, and Psychology would be potential collaborators based on the programs being initiated.

There are opportunities outside of RBHS to collaborate with the insurance industry, as well as other entities with similar missions such as AHRQ and Institute for Healthcare Improvement at a national level, and the Institute for Quality at the NJHA, and the Institute for Healthcare Quality at the state level. In addition potential collaborations include the governmental agencies such as CMS and the Departments of Health and other key departments within the state government.