UNIVERSITY OF WYOMING Report | Statewide BSN Education October 1, 2015

[Pursuant to Enrolled Act No. 56, Senate (2015) as recorded in the Session Laws of Wyoming, 2015 General Session, Chapter 142, Section 067, Footnote 15]

To the Joint Appropriations Interim Committee, Joint Labor, Health and Social Services Interim Committee, and the Joint Education Interim Committee

Section I | Introduction and Overview

During the Sixty-Third Legislature of the State of Wyoming 2015 General Session, the Wyoming Legislature passed Enrolled Act No. 56, Senate (hereinafter SEA0056). SEA0056, Section 067, footnote 15 required:

The University of Wyoming administration and nursing program faculty and administrators, in conjunction with administrators and nursing program faculty from all interested community colleges, shall assess alternatives to deliver a baccalaureate nursing degree program administered by the University of Wyoming at one (1) or more community college campuses in the most efficient and cost-effective manner possible. The university shall report to the joint appropriations interim committee, joint labor health and social services interim committee and joint education interim committee no later than October 1, 2015 on the programmatic, facility, personnel and budgetary needs of such a program, potential sources of state, local and private revenue for the program, projected enrollment and opportunities and challenges identified with curriculum and faculty integration.

To meet the requirements set out by SEA0056, the University of Wyoming, Fay W. Whitney School of Nursing (FWWSON) communicated with all seven community colleges nursing programs to assess "alternatives to deliver a baccalaureate nursing degree program" administered by UW at the community colleges. This effort was a continuation of work that has been ongoing since 2010 with nursing faculty and administrators from FWWSON and community colleges working together toward the goal of statewide bachelor's of science in nursing (BSN) education in order to address the high demand for BSN education in Wyoming by students and employers.

Out of this collaboration came what is now known as ReNEW (Revolutionizing Nursing Education in Wyoming) with the aim of developing a shared, statewide BSN curriculum where a student can earn an associate degree then continue seamlessly to a BSN degree (or

higher), starting at a Wyoming community college and continuing at the University of Wyoming. ReNEW has had significant support from educational programs, employers, foundations and other stakeholders. As a result of this extensive collaboration, the ReNEW curriculum has been developed and is being implemented at UW and all seven community colleges.

In addition to the work done by the FWWSON and community college nursing programs, the President of the University of Wyoming also reached out to each community college president to discuss statewide BSN education. The community college presidents all voiced support for a statewide BSN education.

This report will address the requirements of SEA0056 by first providing background information regarding the need in Wyoming for statewide BSN education. Next, the report will detail the work completed by the university, community colleges and other stakeholders since 2010 to develop ReNEW, Wyoming's approach to statewide BSN education. After a description of ReNEW, this report will discuss the projected enrollments of BSN students following implementation of ReNEW. A section including ReNEW implementation needs and recommendations will follow and conclude this report. For ReNEW to be successful, legislative support for on-site recruitment, advising and teaching at each of the community colleges by UW nursing faculty is needed.

Section II | The Need for Statewide BSN Education

Nurses are in high demand and state and national projections are that demand will remain high and probably increase given the aging of both the nursing workforce and the US population (See Appendix). Moreover, increasingly, hospitals and other healthcare facilities prefer or require nurses to have the BSN given national recommendations and research documenting the positive impact of higher nursing education on patient outcomes. The Institute of Medicine, in its report on the *Future of Nursing*, recommends that 80% of registered nurses have a baccalaureate degree or higher by 2020 (currently, 35-40% of Wyoming nurses have a baccalaureate degree or higher).

As expanded upon in section V, student demand for BSN education in Wyoming has risen dramatically over the last five years. A 2015 study by the Wyoming Survey and Analysis Center (WYSAC) of current Wyoming community college nursing students found that 92% plan to obtain a baccalaureate or higher degree. The number of Wyoming nurses with an associate degree in nursing (ADN) from a Wyoming community college enrolled at UW for a baccalaureate degree has risen 15 fold from 20 nurses in 2008 to 290 in 2014.

Baccalaureate education has become increasingly important due to the association between nurses' education and health outcomes. A recent study by Linda Aiken from the University of Pennsylvania published in *Health Affairs* in March 2013 found that "a tenpoint increase in the percentage of nurses holding a baccalaureate degree in nursing within a hospital was associated with an average reduction of 2.12 deaths for every 1,000 patients." The complexity of coordination of patient care, especially transitional care from hospital to home, requires BSN competencies focused on leadership, population-focused

care and evidence-based practice. Because of these changes in nursing demand and employment, nurses with associate degrees, including those in Wyoming, can be less marketable and have more difficulty finding employment.

Section III | ReNEW: Wyoming's Plan for Statewide BSN Education

In light of the demand for more nurses with a BSN and thus the need for statewide BSN education, nurses and nurse educators from across the Wyoming began meeting in May 2010, developing what has become known as ReNEW. In ReNEW, a Wyoming student can earn an associate degree then continue seamlessly to a BSN degree (or higher), starting at a Wyoming community college and continuing at the University of Wyoming. Students starting at a community college will be awarded the associate degree in nursing (ADN) at the end of the third year. Following the ADN, these nurses can complete the BSN through the University of Wyoming with didactic courses on-line and practicum experiences in public health and leadership in or near students' home communities.

ReNEW is the result of extensive statewide collaborative efforts. A ReNEW Steering Committee was formed in 2010 with representation from FWWSON, the community colleges and other key nursing stakeholders, including representatives from nursing practice (acute care, long-term care, public health nursing) and the Wyoming State Board of Nursing. In 2011, a Master Plan for Nursing Education in Wyoming (ReNEW) was developed with funding from the Wyoming Department of Workforce Services to the Wyoming Center for Nursing and Health Care Partnerships, Wyoming's nursing workforce center and the facilitator of the ReNEW initiative (available at: http://www.wvnursing.org/renew/).

Based on the Master Plan, statewide ReNEW Committees were developed with representatives from FWWSON, the community colleges and nursing practice including hospitals (See Table 1). These committees have been the driving force behind the development of ReNEW.

Members of the ReNEW Steering Committee have focused on overall facilitation of project, resource and financial support, and communication and visibility. The development of ReNEW has been supported by significant funding from the Robert Wood Johnson Foundation (RWJF). RWJF provided \$525,000 with a \$300,000 match by Wyoming funding partners, including UW, community colleges, the Wyoming Community Foundation, hospitals, the Wyoming Nurses Association and others, for a total of \$825,000. The \$300,000 Wyoming match required by the RWJF highlights the incredible statewide support for ReNEW.

Members of the Steering Committee traveled the state since 2012 meeting with UW and community college administrators and faculty, hospital administrators and staff, college trustees and other interested parties to inform them about ReNEW and to seek their input. Meetings were held with college administrators and faculty of all seven colleges at least once and in some cases 2-3 times. Representatives from ReNEW also participated in key

state meetings, including the annual UW-community college academic and student affairs administrator meeting and college president and vice president meetings.

As of April 2014, the statewide ReNEW curriculum has been finalized and the community colleges and UW are working on implementing the new BSN curriculum with anticipated enrollment in 2016, with the exception of Northern Wyoming Community College District (Gillette and Sheridan Colleges) which is considering implementation in 2017.

Table 1: ReNEW Statewide Committees

Curriculum Committee

- Chaired by Kathy Wells, Dean of Health Sciences at Central Wyoming College
- Charged with developing the overall BSN curriculum
- Committee completed its charge in 2014 and has now been replaced by the Curriculum and Evaluation Committee

Curriculum and Evaluation Committee

- Chaired by Kathy Wells, Dean of Health Sciences at Central Wyoming College
- Charged with ongoing curricular oversight of the statewide BSN curriculum and developing an ongoing evaluation plan.
 Committee has just started its work in 2015.

Professional Education Committee

- Chaired by Kathy Luzmoor, Nursing Directors at Western Wyoming Community College.
 Karen Bowen, from Cheyenne Regional Medical Center, and Vickie Rosenberg, from St. John's Hospital, have served as co-chairs
- Charged with planning annual statewide nursing education summits to develop nurses and nursing faculty competencies in all areas of education, including, clinical education.
- Successful summits with over 70 nurses and nurse educators have been held annually the last 5 years.

Clinical Education Committee

- Chaired by Tracy Suhr, nursing faculty at Casper College, and Kristy Nielson from Sweetwater County Memorial Hospital.
- Charged with developing new approaches to clinical education in Wyoming
- Developing toolkits for nurses and nurse educators about innovations in clinical education

Student Support Services Committee

- Chaired by Louise Posten, nursing director from Northern Wyoming Community College District, and Judy Hay, Vice President of Student Services at Laramie County Community College
- Charged with developing processes for co-admission and dual enrollment, transfer of students' financial aid, and joint advising processes

Section IV | Projected BSN Enrollments Following Implementation of ReNEW

Projection of the number of community college nursing students completing their BSN through ReNEW is based on several sources, including historic and current enrollment of community college nursing students at UW, a survey of current nursing students at Wyoming community colleges, and experiences in other states that have developed

statewide curricula. For example, in Oregon approximately 30% of nursing graduates from Oregon community colleges go on to complete their BSN¹.

With the ReNEW curriculum, approximately 30-50% of community college nursing graduates are estimated to continue with UW to complete the BSN each year or between 80 and 130 new students at UW (based on a 6-year average of the number of students graduating with an ADN from Wyoming community colleges). This is a conservative estimate and the number could potentially be much higher given the widespread interest in BSN education by current community college nursing students as highlighted below.

Demand for the BSN program has increased even before the start of the ReNEW curriculum. Nursing faculty from across the state have laid the groundwork for the BSN by strongly recommending to students that they obtain their BSN degree. Students are heeding this advice completing their BSN through UW's current RN-BSN program, an online program for nurses with an ADN. Consequently, FWWSON has seen remarkable growth over the past five years in the number of BSN students who graduated from one of the community colleges at some point (See Table 2). In 2008, 20 RNs with an ADN from a Wyoming community college were enrolled at the University of Wyoming for their BSN; by 2014 that number had risen to 290, an almost 15 fold increase.

Table 2: Number of Wyoming community college ADN graduates enrolled at the University of Wyoming in the BSN program by college and year, 2008-2014.

Community	Year							
College	2008	2009	2010	2011	2012	2013	2014	Total
CC	3	4	15	11	18	61	46	158
CWC		1	2	2	7	19	24	55
LCCC	5	14	10	9	23	82	113	256
NW	4	4	4	5	10	13	18	58
NWCCD	5	7	11	13	12	31	43	122
WWCC	3	2	5	4	6	37	46	103
Total	20	32	47	44	76	243	290	752

The Wyoming Survey & Analysis Center completed a survey of current ADN students at six of the seven Wyoming community colleges in 2014-2015 to ascertain their interests in BSN education (Eastern Wyoming College was not included in the study because they are currently in the process of developing a nursing program and do not have any nursing students). With good representation from the six colleges, 92% of the 247 current nursing students at Wyoming community colleges responding to the survey reported that their goal was to obtain a BSN or higher, with 48% reporting a graduate degree in nursing as their goal (see Table 3).

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¹ Munkvold J, Tanner CA, & Herinckx H. (2012). Factors affecting the academic progression of associate degree graduates. *Journal of Nursing Education*, 51(4), 232 – 235.

Table 3. Wyoming ADN Students: Highest Degree Desired

Highest Degree Desired	Frequency	Percent		
ASN	13	5%		
BSN	108	44%		
Graduate nursing degree	118	48%		
Bachelors or higher in non-nursing field	8	3%		
Total	247			

Of those interested in continued education after their ADN, 84% reported they planned to work concurrently on their BSN while in their ADN program or start the BSN program within 1 year of completing their ADN. In addition, the majority of these ADN students (57% or 148) plan to complete their BSN at UW (see Table 4). Another 25% (or 64 students) are unsure.

Table 4. Plans to Pursue a BSN at the University of Wyoming

Pursue BSN at UW?	Frequency	Percent		
No	34	14		
Yes	148	60		
Unsure	64	26		
Total	246			

Section V | Implementation of ReNEW: Needs and Recommendations

The implementation of the ReNEW curriculum requires a number of programmatic, facility and personnel resources, some of which can be managed with existing resources while others require new resources. The following recommendations are critical to the success of ReNEW.

<u>Faculty positions</u>: The most critical need for successful implementation of ReNEW is on-site recruitment, advising and teaching at each community college. This will require seven (7) new academic positions (assuming the new program at EWC is approved by the Wyoming State Board of Nursing). One additional faculty member is needed to oversee the implementation and evaluation of the ReNEW statewide curriculum. These eight positions will be academic professional (APL) positions, as defined by UW, specifically requiring an expert nursing clinician with a master's degree in nursing. The job description of the APLs would be approximately 60% teaching, 20% advising and recruitment, 5% professional development, 10% research and 5% service.

In the ReNEW curriculum, the first three years of the BSN degree can be completed at Wyoming community colleges with the fourth year completed through UW. A variety of

distance learning approaches will be used during that fourth year so that students do not need to relocate to Laramie to complete the BSN. However, the ReNEW curriculum requires two extensive practicum courses in public health and nursing leadership during the fourth year. It is critical that UW faculty be present at each of the community colleges to provide teaching in the classroom and especially in a variety of clinical settings for the practicum courses. Moreover, advising about BSN education with high school and freshmen college students will be important for timely completion of the BSN program.

The UW faculty positions at the community college will increase enrollments in the ReNEW curriculum. Currently, UW faculty are available for BSN recruitment and advising at 3 of the community colleges. At these colleges, significant increases in student BSN enrollment at UW are evident. Since 2008, 752 students, who graduated from a Wyoming community college, are completing their BSN and 70% of these students come from the three programs where temporary arrangements provide on-site recruitment and advising (Casper College, Laramie County Community College and Northern Wyoming Community College District). LCCC is a good example of what happens when a UW nursing faculty member is placed at a community colleges. Prior to 2012, there was no onsite advising at LCCC and between 5 and 14 students began work on their BSN degrees at UW each year. After the start of the onsite advising, the number of ADN students working on their BSN degrees jumped dramatically with 23 in 2012, 82 in 2013 and 113 in 2014.

There is no current source of funding for these faculty positions. Private funds are currently being used to support on-site recruitment and advising for the BSN program offered at several community college locations (Casper College and Sheridan College). However, the arrangements for onsite UW nursing faculty members are temporary, are only available at some of the Wyoming community colleges, and are not sustainable with the current private support.

If the budget request for nursing faculty positions is not funded, reallocation of resources away from existing nursing programs will be required. For example, faculty and staff in the UW RN-BSN program, which provides BSN education for nurses educated outside of Wyoming or prior to the implementation of ReNEW, could be reallocated to support ReNEW. However, this will decrease the availability of BSN education to nurses in the state who have already completed their ADN who also have significant needs for continued education.

<u>Student tracking between community colleges and UW</u>: ReNEW requires a tracking system that will allow UW and the colleges to monitor student progress from the community colleges to UW. UW, in collaboration with the community colleges, is piloting Transfer Advance, a program designed to track students between the Wyoming higher education institutions. It is hoped that Transfer Advance will be able to be used for tracking of students in ReNEW.

<u>Office and Teaching Space</u>: With UW nursing faculty at each community college, office space, classroom and simulation space will be needed. The community colleges all have classroom and clinical simulation space available for nursing education. Office space may

be more challenging on some of the college campuses, although UW also has Outreach Centers on each of the college campuses with some available space.

<u>Operational Expenses</u>: Implementation of ReNEW also requires a variety of operational expenses, including travel (for articulation, advising, recruitment, supervision of clinical experiences), professional development, support (copying, postage, phone use), instructional materials, maintenance of the preceptor orientation modules and the clinical passport system, and equipment. Staff support for faculty and the ReNEW curriculum will also be important.

Operational expenses will be covered using revenue provided to the FWWSON through the UW Outreach School Tuition Sharing model in which the school receives 50% of the tuition for students taking UW outreach courses. Given that these faculty positions will be teaching in the fourth year of the ReNEW curriculum, each of the faculty members will bring in about \$10,000-\$15,000 per year in tuition revenue to FWWSON based on the 50% tuition sharing plan. The amount would vary depending on the actual number of courses taught, total number of students, and the mix of resident and nonresident students in each course, but generally should be enough to cover operational expenses.

Section VI | Conclusion

ReNEW (Revolutionizing Nursing Education in Wyoming) is a shared, statewide BSN curriculum where a student can earn an associate degree then continue seamlessly to a BSN degree (or higher), starting at a Wyoming community college and continuing at the University of Wyoming. The curriculum is being implemented at UW and all seven community colleges. ReNEW has had significant support from educational programs, employers, foundations and other stakeholders.

For ReNEW to be successful, legislative support is needed. The most critical need is on-site recruitment, advising and teaching at each community college. This will require seven new academic positions (assuming the new program at EWC is approved by the Wyoming State Board of Nursing). One additional faculty member is needed to oversee the implementation and evaluation of the ReNEW statewide curriculum. There is no current source of funding for these faculty positions. The University is requesting \$1,740,000 in salaries and employee paid benefits for the 2017/2018 biennium to place one of these nursing faculty members at each community college.

While arrangements have been made to provide recruitment and advising for BSN education on several of the community college campuses, the arrangements for onsite UW nursing faculty members are temporary, are only available at some of the Wyoming community colleges, and are not sustainable with the current private support. Furthermore, if the budget request for nursing faculty positions is not funded, reallocation of resources away from existing nursing programs will be required, which will decrease the availability of BSN education to nurses in the state who have already completed their ADN who also have significant needs for continued education as.

Appendix: Wyoming High-Demand, High-Growth Occupations (2014)

Table 1: Wyoming Occupational Projections and Average OES^a Based Hourly Wage for Occupations with an Hourly Wage of Greater than or Equal to \$14.00 and Projected Employment Growth of More than or Equal to 200 Jobs Over the Next Decade

SOCP		Employment		Change		Hourly	
Code	SOC Title	2012	2022	N	%	Wage	Typical Education
47-2031	Carpenters	3,908	4,706	798	20.4	\$19.66	H.S. diploma or equiv.
49-9041	Industrial Machinery Mechanics	2,407	3,115	708	29.4	\$27.21	Post-Secondary Cert.
	Registered Nurses	4,738	5,619	881	18.6	\$29.56	Associate's degree
	Heavy & Tractor-Trailer Truck Drivers	7,081	7,901	820	11.6	\$22.28	H.S. diploma or equiv.
11-1021	General & Operations Mgrs.	5,352	6,153	801	15.0		Associate's degree
43-3031	Bookkeeping, Accounting, & Auditing Clerks	4,718	5,396	678	14.4	,	H.S. diploma or equiv.
47-2061	Construction Laborers	3,907	4,567	660	16.9	\$15.61	H.S. diploma or equiv.
	Secretaries & Admin. Assist., Exc. Legal, Medical, & Executive	4,787	5,412	625	13.1	\$16.08	H.S. diploma or equiv.
	First-Line Supervisors of Const. Trades & Extraction Workers	3,743	4,323	580	15.5	\$31.68	H.S. diploma or equiv.
	Maint. & Repair Workers, General	3,966	4,442	476	12.0	\$20.03	H.S. diploma or equiv.
	Office Clerks, General	5,630	6,087	457	8.1	\$14.61	H.S. diploma or equiv.
	Electricians	2,751	3,171	420	15.3	\$25.82	Post-Secondary Cert.
25-2021	Elementary School Teachers, Except Special Education	2,649	3,031	382	14.4	\$27.63	Bachelor's or Master's degree
	Sales Reps., Wholesale & Mfg., Exc. Tech. & Scientific Products	2,115	2,494	379	17.9	\$28.18	Bachelor's degree
	Operating Engineers & Other Const. Equipment Operators	5,543	5,917	374	6.7	\$23.66	H.S. diploma or equiv.
43-6013	Medical Secretaries	1,169	1,534	365	31.2	\$15.06	H.S. diploma or some college
53-7062	Laborers & Freight, Stock, & Material Movers, Hand	2,269	2,625	356	15.7	\$15.15	H.S. diploma or equiv.
	Service Unit Operators, Oil, Gas, & Mining	3,130	3,472	342	10.9	\$24.04	H.S. diploma or equiv.
43-4051	Customer Service Reps.	1,919	2,260	341	17.8	\$14.14	H.S. diploma or equiv.
51-4121	Welders, Cutters, Solderers, & Brazers	2,437	2,732	295	12.1	\$23.59	Post-Secondary Cert. or A.A.
13-2011	Accountants & Auditors	1,887	2,161	274	14.5	\$29.77	Bachelor's degree
	First-Line Supervisors of Office & Admin. Support Workers	1,928	2,170	242	12.6	\$22.37	On-job training or A.A.
41-1011	First-Line Supervisors of Retail Sales Workers	3,735	3,973	238	6.4	\$19.02	On-job training or A.A.
53-3033	Light Truck or Delivery Drivers	1,475	1,692	217	14.7	4	H.S. diploma or equiv.
47-2141	Painters, Const. & Maintenance	1,092	1,304	212	19.4	\$17.62	H.S. diploma or equiv.
47-2152	Plumbers, Pipefitters, & Steamfitters	1,085	1,294	209	19.3	,	H.S. diploma or equiv.
47-5071	Roustabouts, Oil & Gas	2,044	2,253	209	10.2	\$19.42	H.S. diploma or less

^aOccupational Employment Statistics.

Source: Wyoming's Occupational Projections 2012 to 2022 and Wyoming's Occupational Employment Statistics 2013. Wyoming Department of Workforce Services, Research & Planning.

Published in Planning vs. Performance: Why Outcome Wages May Fall Short of Accountability Measures. Wyoming Labor Force Trends, 52(6). Available at http://doe.state.wy.us/lmi/trends/0615/a1.htm

Tony Glover, WYDWS Research & Planning. 08/01/2014.

^bStandard Occupational Classification System.