MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON HEALTH AND HUMAN SERVICES

Seventy-Seventh Session
February 20, 2013

The Committee on Health and Human Services was called to order by Chair Marilyn Dondero Loop at 1:37 p.m. on Wednesday, February 20, 2013, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. Copies of the minutes, including the Agenda (Exhibit A), the Attendance Roster (Exhibit B), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at nelis.leg.state.nv.us/77th2013. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblywoman Marilyn Dondero Loop, Chair
Assemblywoman Ellen B. Spiegel, Vice Chair
Assemblywoman Teresa Benitez-Thompson
Assemblyman Wesley Duncan
Assemblyman Andy Eisen
Assemblywoman Michele Fiore
Assemblyman John Hambrick
Assemblyman Pat Hickey
Assemblyman Joseph M. Hogan
Assemblyman Andrew Martin
Assemblyman James Oscarson
Assemblywoman Peggy Pierce
Assemblyman Michael Sprinkle

COMMITTEE MEMBERS ABSENT:

Assemblyman Steven Brooks (excused)

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Kirsten Bugenig, Committee Policy Analyst
Janel Davis, Committee Secretary
Macy Young, Committee Assistant

OTHERS PRESENT:

Richard Whitley, M.S., Administrator, Health Division, Department of Health and Human Services, and Administrator, Division of Mental Health and Developmental Services, Department of Health and Human Services
Tracey Green, M.D., State Health Officer, Health Division, Department of Health and Human Services, and Medical Director, Division of Mental Health and Developmental Services, Department of Health and Human Services
Jay Kvam, M.S.P.H., State Biostatistician, Health Division, Department of Health and Human Services
Cheryl Blomstrom, representing Nevada Nurses Association

Chair Dondero Loop:
[Roll was called. Rules and protocol were stated.] Our first agenda item is an overview of the Nevada State Health Division and the Division of Mental Health and Developmental Services. This is a continuation of presentations enabling us to become better acquainted with programs relating to this Committee. I would like to welcome Mr. Whitley to the table.

Richard Whitley, M.S., Administrator, Health Division, Department of Health and Human Services, and Administrator, Division of Mental Health and Developmental Services, Department of Health and Human Services:
With me today is Dr. Tracey Green, the State Health Officer for the Health Division and Medical Director for the Division of Mental Health and Developmental Services. On my right is Marla McDade Williams, Deputy Administrator, Nevada State Health Division (NSHD), Department of Health and Human Services (DHHS).

I provided a presentation (Exhibit C) entitled Department of Health and Human Services, Public & Behavioral Health. I wanted to begin by giving some background information. Public health is population based. It focuses primarily on prevention, early intervention, and access to quality health care. Nevada's public health system comprises of three local health departments: Washoe County District Health Department, Carson City Health & Human Services, Southern Nevada Health District, and the State Health Division in the rural area.

The Nevada State Health Division is about 65 percent federally funded, 30 percent fee funded, and 5 percent is from the General Fund. The functions of the NSHD fall into three areas. First is community services, which consist of programs that are federally funded and translated into subgrants to community providers; second is direct services, which are the rural services; third is the regulatory and planning services.

Several years ago, the hepatitis C outbreak was associated with an ambulatory surgery center. This regulatory role within the NSHD has grown considerably through incremental policy making, to frequency, and responsibility of the Health Division. Last session, as a responsibility of the Health Division, we added licensing for individuals such as music therapists and dieticians. This regulatory function has grown over time to include health facilities and people.

I want to acknowledge Marla McDade Williams who has done a great job in coordinating and assuming responsibility in this regulatory area. A good example is with health facilities. Historically, we sent three different programs into a single facility. We would send in health facility regulators to look at the quality of health care; radiological staff to look at X-rays and mammography; our laboratory staff; and then our environmental staff to look at food safety. Ms. Williams has done a great job integrating this regulatory function for efficiencies. This is 100 percent fee funded which means that the industry pays to be regulated. In combining these efforts we are efficient as a team going into a facility because if there is a problem in one area, it is often an indication that there may be a problem in another area. By sending regulators to a facility at different intervals, there are sometimes disruptions. I think we have made an effort in synchronizing this function. As we move forward, there are bill draft requests (BDRs) continuing to refine our work in the regulatory arena.

Page 3 (Exhibit C) lists the behavioral health functions residing in the Division of Mental Health and Developmental Services (MHDS). The State of Nevada is the largest provider of direct mental health services. We do this through three hospitals: the Rawson-Neal Psychiatric Hospital in Las Vegas, the Dini-Townsend Inpatient Facility at Northern Nevada Adult Mental Health Services in Reno, and Lake's Crossing Center, a forensics hospital in Sparks. In total, there are 300 statewide hospital beds. We primarily serve adults; however, we serve children in rural Nevada.

Also included in MHDS is the Substance Abuse Prevention and Treatment Agency (SAPTA). The services provided out of SAPTA include both prevention and treatment. Much like mental health, those services are funded at a community level and are provided for by nonprofit agencies. Unlike the Health Division, mental health is primarily provided for by the General Fund. The

Division of Mental Health budget is built with approximately 50 percent of the budget allocated to Medicaid expansion. This represents a change in how mental health has historically provided services. There is not a lot of incentive built in to state programs that are reliant on the General Fund to be good at billing. We have not been successful at bringing in revenue that was possible with Medicaid. In our budget, we have built in an enhancement to our billing unit. Most of Nevada's mental health services are provided through clinics, which are heavily staffed. In order to pay for this staff, our billing must improve effective January 1, 2014 when Medicaid expansion will roll out.

I would like to talk about the integration of behavioral and public health. On page 4 (Exhibit C) you can see, organizationally, that we share the structure across the programs in terms of the community functions I mentioned. We identified multiple programs that were funding the same agencies, creating multiple versions of site visits and grants management. We were not communicating effectively across all programs. Nonprofit organizations are struggling in the State of Nevada. We have seen a lot of non-profits close due to financial challenges with grants. It becomes even more important for us to congregate our activities for grants management because it makes it more efficient and allows for more funding to go to the community which creates more services. It also makes our ability to oversee the agencies we grant funds to more efficient. The benefits we are seeing of integrating that approach have been primarily identified to the community as grants management. I think we will also see benefits with being more competitive for grants. The NSHD is grant funded, but does not have grant writers. People will volunteer to write a grant when it becomes available. Nevada is not always the best at applying for all of the federal funds available. We noticed several grants from the Substance Abuse and Mental Health Services Administration (SAMHSA) and the U.S. Department of Justice that Nevada never applied for. On the grants management side of things, I see an additional benefit from the coordination between behavioral health and public health.

On the clinical services side, Nevada is often in a role of being a safety net as a service provider. This is especially true in rural and frontier Nevada. It is difficult to recruit and retain clinical staff in these areas. In the urban areas, there is also a shortage of psychiatrists, social workers, and marriage and family therapists. By coordinating the clinical services, together we can consolidate efforts when we serve the same client. It is best illustrated in the rural areas. If we are seeing an underserved client for a behavioral health issue, they likely need to be immunized or educated about family planning and other public health programs. The benefits, in terms of coordinating the clinical services, are efficiency and capacity.

Marla McDade Williams identified that our drug and alcohol treatment agencies are regulated more than our hospitals. They have national accreditation, are certified by SAPTA, are licensed by the Bureau of Health Care Quality and Compliance; and they have to pay for this out of pocket. So, they pay the fees for the Health Division to license them. The SAPTA uses grant funding to pay out of pocket for the national accreditation credentialing. There was a great deal of overlap between each of the entities going in. We have a BDR looking at consolidating those efforts in oversight and putting them more in alignment with how we regulate other health care facilities.

Page 5 (Exhibit C) provides more detail in terms of oversight and the budget accounts that are involved. For the past year, Dr. Tracey Green and I have been performing both roles for both divisions. The big element in our budget is to reclassify the job of the administrator into a deputy. The position is vacant, but we are currently in these roles. We have not promoted our consolidated plan as a cost savings because the cuts that have occurred to both health and mental health are trying to restore infrastructure. Most of the direct service programs make cuts from the top. For example, SAPTA cut five and a half positions that oversaw grants management. They were criticized in an audit for not monitoring as well as they could. We have seen this problem occur in several programs. I think programs try to cut from the top to sustain direct services. In this integration, I am not proposing that we will realize cost savings. In our budget, we are not proposing that this costs more money. We are translating some vacant positions into other roles, but it is not going to save money. It will make us more efficient and restore some of the capacity that was lost when budget cuts occurred.

Page 6 (Exhibit C) discusses some of the benefits of integration. I know that hearing about data is not always interesting. Data is usually presented in the form of Nevada ranking poorly in something. The benefit that we have seen with the integration of behavioral health and public health is using data to tell us where we can best intervene early, not only saving lives or improving health, but saving money. This is a concept that has not been utilized, mostly because the lines for service are so long. The idea of moving up in the line and seeing where you can intervene earlier is something that has not existed in mental health. This is a direct benefit from a public health approach.

As I stated earlier, the approach in public health is primary prevention if it is possible. If a disease can be prevented, that needs to be the focus. If a disease can be screened or detected early, then that needs to be the focus. If a service needs to be provided, then there needs to be access and quality services. Those three processes and utilizing the data are all benefits that public health will bring to mental health. We will end our presentation with

some examples of direct benefits. Other areas for both public and mental health are education and communication to at-risk populations. A lot of programs are funded categorically, but people exist as a whole in a community. There are behaviors that put people at risk for multiple diseases or intervention strategies that will prevent costly diseases. Integrating the health care system is the right thing to do for efficiency, but it is also important to recognize that in the Affordable Care Act (ACA) and the expansion to Medicaid, both behavioral health and preventative health are covered as basic benefits. Having the payer source available to clients ensures that people who are accessing services for behavioral health are also getting screened and immunized and accessing primary care. Historically, this has not been done, but the expansion of Medicaid allows it with a payer source. We must design our health care system so that it can be responsive to that.

An example of this is jail discharge, a problem identified early on when Dr. Tracey Green and I assumed these roles for public health and behavioral health. We were hearing compelling cases about people who were leaving jail and not getting mental health services, even though they previously had been clients of the mental health system. There was a breakdown between systems. Through the cooperation with sheriffs in Carson City, Clark and Washoe Counties, we were able to utilize state mental health data to identify how many inmates were also clients of the mental health system. Around 20 percent, with some variations in each community, were identified as clients receiving services in an outpatient manner from the state mental health system.

We went further to see how many of these people had been frequently hospitalized and incarcerated. The failures of the system suggested simple solutions. The primary problem was that people were being discharged with three days' worth of medication and yet their appointment with the state mental health system was sometimes not for 30 to 60 days of their discharge. The tragedy in that is often the jails were getting compliance with medication. These severely mentally ill inmates were leaving stabilized, but decompensating by the time they got in to mental health. We have initiated a jail discharge program in Washoe, Carson, and Clark Counties. Our goal is to initiate the program statewide; we are trying to work with the rural counties. We want to be able to quantify the problem so that we can monitor the success. We are asking for their data so we can identify the problem, as well as strategize interventions that meet the needs of those communities. We identified the problem which was a breakdown between systems, and came up with a solution that was not costly. Dr. Green would like to provide some additional examples.

Tracey Green, M.D., State Health Officer, Health Division, Department of Health and Human Services and Medical Director, Division of Mental Health and Developmental Services, Department of Health and Human Services:
It is a pleasure to share some examples of our successes. In the description of integration, as a primary care physician interested in affecting population, the examples I am going to give you will show that by using primary care techniques of data collection and goals of prevention and early intervention, we have started to move toward changing populations and implementing service delivery model changes and services.

The first example I want to talk about is our movement toward the implementation of school-based health centers across Nevada. From a data perspective, we have identified that at least, if not more than, 20 percent of our child and adolescent population have mental illness. Of that population, at least 13 percent suffer from "serious emotional disturbance." In adults, it is called serious mental illness. What is more profound is that 70 percent of those children are not able to access services. School-based centers provided an opportunity for a solution to access and improvement of dropout rates. Over the last two years, we have created the office of School Based Child Health Services at the Health Division. We have implemented statewide standards and recently released three planning grants for three school-based health centers. We had six proposals for integrated approaches of the delivery of services for students, all of which had the mandatory requirements for incorporating some level of behavioral and primary health services. We are moving in the direction of opening new access points and school-based health services for children in our state.

The second example looks at the suicide population. We utilized the death data, which are the vital records, or death certificates. We looked at the death certificates to determine cause of death and what the veteran status was. Looking at this data, we pulled out how many suicides were occurring in veterans. We found profound data. Women veterans in Nevada had almost twice the rate of suicide than the national suicide rates. We found that women veterans' suicide rates were higher than non-veteran and national suicide rates. We have been working with the Nevada Office of Veterans Services. We have qualified for funding that will let us look at new ways to approach this population by preventing, assessing, and delivering services to our veterans who are suffering. We can do this by using public health data collection and targeting new projects and programs to address Nevadans.

The third example I want to present stems from some work I did at a psychiatric hospital while serving as the medical provider. There were two pregnant women admitted to our acute psychiatric facility. We realized that when you

are admitted and you are pregnant, oftentimes you are off all psychiatric medications because there are strict contraindications for being on those medications during pregnancy. When we looked at the data, we discovered there were not many resources for women who had mental health or psychiatric issues to learn about family planning options. Within our system, we did not ask questions about opportunities to learn about family planning or primary care services. We have since incorporated into our hospital discharge planning questions that ask about primary care providers and where resources are available, and then referring them to local outpatient clinics that incorporate those primary resources and family planning resources.

The next example is about screening for cancers. When we look at the population of those suffering from serious mental illnesses, what we know is that they die 25 years earlier than the general population. I found this to be profound data. The causes of death are the same conditions that the general population dies of: cardiovascular disease, diabetes, and chronic lung disease. We found that the population is not receiving screening or access to services. We are now able to focus on the integration of public and mental health by using our primary care services and mental health services to provide screening opportunities to all populations; for instance, providing behavioral health services to our public clients and our primary health services to our mental health clients to hopefully affect that data and prolong life for all.

Lastly, I would like to mention colocation, also known as access improvement. As an example, we have some communities, especially in rural Nevada, where we have a public health clinic, a mental health clinic, and an emergency room all down the street from each other. The primary doctor may be in one office, immunizations will need to be done in another office, and mental health services are in another office. That is often difficult to coordinate. We found that we can share resources, share services, and essentially have a single entry point for all services. We are looking to deliver that model in all counties. All of these examples speak to the benefits of integration, both from a public health and mental health perspective.

Chair Dondero Loop:
Are there any questions?

Assemblyman Hickey:
Did you say that 20 percent of our population may suffer from mental illness?

Tracey Green:
The 20 percent mentioned is national data looking at adolescents and children.

Assemblyman Hickey:
Do we have numbers going back 5 to 20 years comparatively? I am sure we are more sophisticated looking at this data today than 20 years ago. If we are seeing 20 percent now, where are we going to be in 10 or 20 years? You also raise the question of family planning. Where is this taking us? I realize the problems are extremely complex, but I do not think I have heard anything more disturbing.

Tracey Green:
My hopes would be that with early intervention and the opportunity to receive screening, we may be able to affect some of these numbers. Clearly, the picture of the future is how to achieve access.

Assemblyman Oscarson:
I would like to share a success story. Having worked in a rural hospital, we faced a lot of issues Dr. Green talked about. She was kind enough to come to our rural hospital and work closely with the sheriffs, the administration of the hospital, and the emergency room staff. We have implemented a program where the mental health system is much more accessible and which we hope will be a model. I think this is the way it will go. Mr. Whitley and Dr. Green's leadership has gone a long way in streamlining that process for all the hospitals. I applaud and appreciate their effort.

Chair Dondero Loop:
Has there been any consideration to having children's mental health services included in regular mental health services? Are most states structured like Nevada?

Richard Whitley:
Nevada is an unusual state with how we are organized. Most states moved mental health from a state-level service provision to a community-level service. Right now, most states deliver mental health at a community level both with adult and children's mental health. If Dr. Green and I had more time, we may have proposed our budgets differently. I see some economy in coordinating our hospitals. Our budgets are organized regionally. If you look at corporate hospitals, there is a greater capacity with hospitals being centralized. A good example would be if there was a shortage of dieticians in hospitals, we could use dieticians across budgets in our hospitals. I think this is incremental policy making in terms of looking at behavioral health. As we go forward, I think we will need to look across the lifespan of services in the outpatient area, especially children aging out of children's mental health into adult mental health. That is an issue that will be addressed in our budget. We also need to look at the challenge of hospitals with the state provision of hospitalization; there is some

capacity we could look at. We are most unique in Nevada because of the State being the primary provider of all these services.

Chair Dondero Loop:
Are there any additional questions? [There were none.] I will now open the hearing on Assembly Bill 28. Dr. Green will present the bill.

Assembly Bill 28: Revises the definition of "sentinel event" for the purpose of provisions relating to the health and safety of patients at certain medical facilities. (BDR 40-311)

Tracey Green, M.D., State Health Officer, Health Division, Department of Health and Human Services and Medical Director, Division of Mental Health and Developmental Services, Department of Health and Human Services:
With me today is Jay Kvam, State Biostatistician, and Julia Peek, Manager, Office of Public Health Informatics and Epidemiology. The Health Division is responsible for maintaining the Sentinel Events Registry. A "sentinel event" is defined in statute as an unexpected occurrence involving facility-acquired infection, death or serious physical or psychological injury or the risk thereof, including, without limitation, any process variation for which a recurrence would carry a significant chance of a serious adverse outcome. The term includes loss of limb or function.

It is called a "sentinel event" because it signals the need for immediate investigation and response. Mandatory reportable sentinel events include events that have resulted in an unanticipated death or major permanent loss of function not related to the natural course of the patient's illness or underlying condition. Examples of sentinel events include surgeries on the wrong body part, medication errors, elopements, contaminated drugs, and assaults. Currently, some hospital-acquired infections are also included on the list of sentinel events. *Nevada Revised Statutes* (NRS) 439.805 identifies the medical facilities required to report sentinel events, which include hospitals, ambulatory surgery centers, independent emergency rooms, and obstetrical centers.

Assembly Bill 28 requests a definition change for "sentinel events" because of two issues created by the current definition. Within the current definition of "sentinel events," there are two key phrases that are problematic: "unexpected occurrence" and "risk thereof." These terms are ambiguous because they are not statutorily defined; therefore, individual facilities and the State have differences in their uses and interpretations for reporting. The consequence is that we have difficulty making accurate inter-facility comparisons and have had to do case-by-case reviews to determine if a case is to be reported.

Another issue created by the current definition is the need for facilities to report hospital-acquired infections to both the Sentinel Event Registry and the National Healthcare Safety Network. The Centers for Medicare and Medicaid Services (CMS) require that facilities submit claims for hospital-acquired infections to the National Healthcare Safety Network. Nevada also requires that facilities report health care-associated infections to the National Healthcare Safety Network. The requirement for reporting health care-associated infections is in two places in NRS. It is listed under "sentinel events" and is separately listed under NRS 439.847. This requires duplicate reporting by all facilities.

Assembly Bill 28 proposes to align the definition of "sentinel events" with the National Quality Forum (NQF) list of serious reportable events. The NQF is a national standard-setting organization that works to improve quality of American health care and provide guidance to health care organizations for reporting and improving patient safety. The NQF has been working with serious reportable events since 2002. The definitions of NQF have been adopted as the standard by at least 14 of the 27 states requiring sentinel event reporting.

The Nevada State Health Division has worked closely with the Nevada Hospital Association since last session in order to come up with a definition that is clear and meets the intent of the law. By adopting the NQF definition, A.B. 28 would standardize and define reporting requirements, remove ill-defining terminology, and eliminate the duplicative reporting of health care-associated infections to both the sentinel events registry and National Healthcare Safety Network. The National Healthcare Safety Network would be dedicated to reporting health care-associated infections while the sentinel events registry would focus on all other serious adverse events. Both of these reports would continue to be required to be submitted to the Nevada State Health Division and made available to the public in an annual report.

Chair Dondero Loop:
Are there any questions?

Assemblywoman Pierce:
How many other states use the National Quality Forum?

Tracey Green:
Fourteen of the 27 states that require sentinel event reporting use the NQF.

Assemblyman Sprinkle:
Can you send the Committee the wording you want changed in the definition of "sentinel event?"

Tracey Green:
Yes.

Assemblyman Oscarson:
Since this reporting is not standardized, does it make Nevada's system look more despondent than it should?

Tracey Green:
Yes. It does not allow for interhospital comparison of data, especially because of the "risk thereof" information.

Assemblywoman Spiegel:
Do you know if they change their definition often of what is included in the "sentinel event?"

Jay Kvam, M.S.P.H., State Biostatistician, Health Division, Department of Health and Human Services:
They do not change the language frequently, but there is a panel that originally adopted those standards in 2002. Since then, they have revised them on two separate occasions, one in 2006 and one in 2011.

Assemblywoman Spiegel:
By adopting this bill, would it be difficult to keep up with any future changes that they make? Would there be a notification when it changes so that we would not be out of compliance?

Jay Kvam:
The language in the proposed bill specifies a timeline for the adoption of those. The notifications are received by the Health Division from NQF when they make those alterations because we coordinate with NQF.

Assemblyman Eisen:
In terms of the dissemination of that information when there are updates to the facilities required to report, is that the responsibility of the hospitals, something that the department will do proactively, or do they get this information directly from NQF?

Jay Kvam:
We would proactively send that out. Even if we were delayed by a couple of days, it would be accessible via the public posting from NQF so hospitals could monitor that as well.

Assemblywoman Fiore:
What qualifies someone to be in the category of mentally ill?

Chair Dondero Loop:
I think that was the presentation, but if you want to answer that, Dr. Green, please go ahead.

Tracey Green:
I think that is a broad definition given that it entails a number of diagnoses that are listed in the Diagnostic and Statistical Manual of Mental disorders. There are a number of diagnoses that would quality for mental illness.

Assemblywoman Fiore:
My question stems from the 20 percent.

Assemblywoman Pierce:
I am looking at the report, and it lists seven categories. Is everything under those seven categories how we would define a sentinel event?

Tracey Green:
I am wondering what list you are referring to.

Assemblywoman Pierce:
I am looking at the National Quality Forum Report on serious reportable events.

Tracey Green:
The NQF list of categories would be the categories of how we would define a "sentinel event."

Assemblyman Hogan:
I hope that it would be possible to expand the effort to come up with specific remedies to look at the poorly addressed mental health conditions in our prisons and our mental health conditions for the elderly. I think with an expansion in the ideas addressed here today, Nevada could become a respectable state overnight.

Assemblywoman Spiegel:
In the current NRS we include psychological injury on the list. I did not see any category that directly correlates to psychological injuries. I am wondering if that had been a point of discussion in putting this proposal forth.

Jay Kvram:
That is not a category formally defined by NQF. It has not been something we have extensively discussed because some of the states we are coordinating with are adopting NQF and we felt that was a good route to go.

Assemblywoman Spiegel:
Does that mean there would be reporting of psychological "sentinel events?"

Tracey Green:
Some psychological events would be included such as assaults and elopements. Again, there would be the need for a more clear, less ambiguous definition.

Chair Dondero Loop:
The Committee will request that Ms. Bugenig send us the NQF Report (Exhibit D). The website is <www.qualityforum.org>. It is located under reportable events and health care. We will now hear testimony in support of A.B. 28.

Cheryl Blomstrom, Nevada Nurses Association:
I am here to support A.B. 28. With respect to patient care and patient safety, the more you familiarize a reporting process and the less ambiguity involved, the better it is for patients, nurses, health care providers, and for health care facilities. We wholeheartedly support this.

Chair Dondero Loop:
Is there any opposition to A.B. 28? [There was none.] Is there anyone neutral? [There was no one.] I will close the hearing on A.B. 28.

This meeting is adjourned [at 2:32 p.m.].

RESPECTFULLY SUBMITTED:

_____
Janel Davis
Committee Secretary

APPROVED BY:

_____
Assemblywoman Marilyn Dondero Loop, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Health and Human Services

Date: February 20, 2013 **Time of Meeting: 1:37 p.m.**

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
	C	Richard Whitley	Presentation
	D	Kirsten Bugenig	Appendix Report