

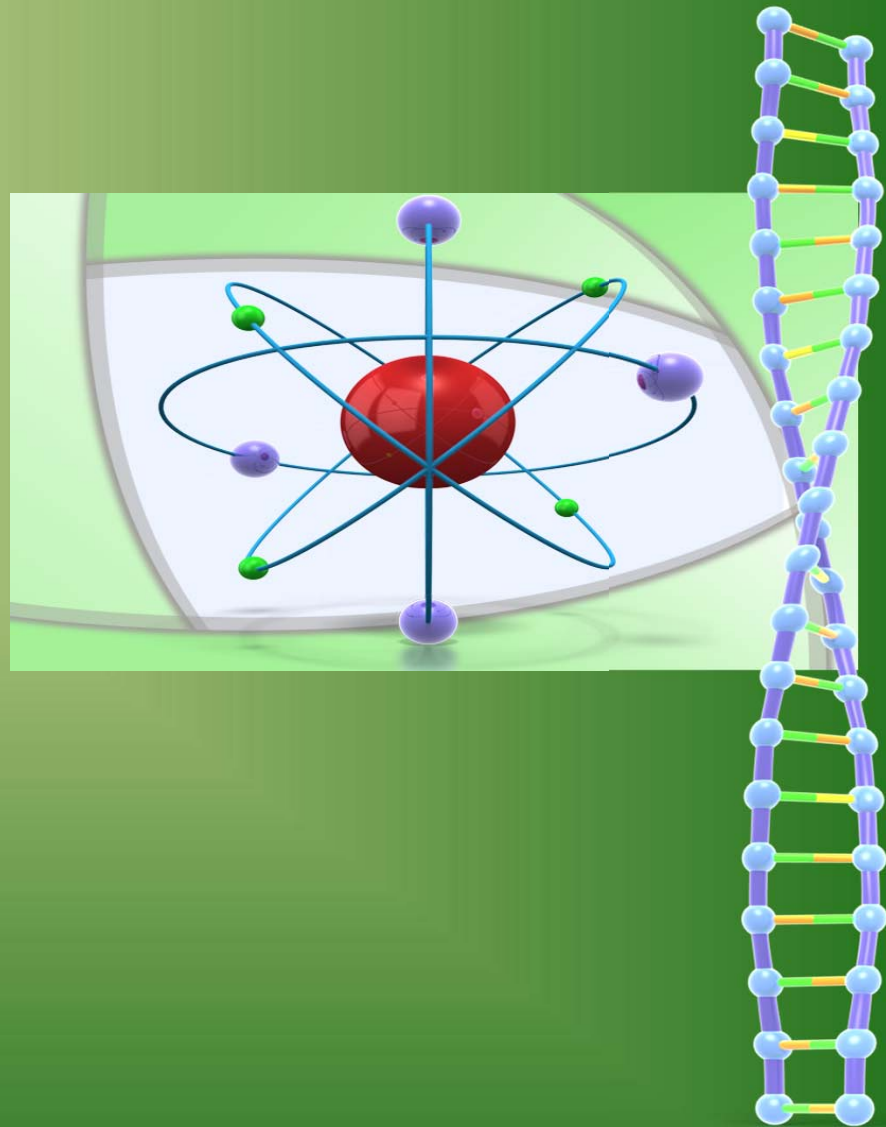
Expanding RN Scope of Practice: Method for Introducing a New Competency into Nursing Practice **(MINC)**



Jan Questad, RNBC, BAN
Avera BHS Clinical Nurse Educator

MINC

- The motivation for this application to the National Council State Board of Nursing include
 - Rapidly changing healthcare environment
 - Emerging genomic technology and discoveries
 - Desire to assure improved patient care outcomes (i.e., public welfare and safety)



MINC Scope of the Grant

- Why focus on Nurses?
 - Frontline
 - Trusted by patients and their families
 - Expected to provide safe and competent care
 - Challenged to remain current on advances in care
- *Institute of Medicine (IOM) Report on the Future of Nursing noted that preparing nurses for expanded roles will require changes in nursing education.*

MINC participants

- 1 rural Hospital
- 3 Children's Hospitals
- 1 VA Hospital
- 1 Cancer Center
- 1 Behavioral Health Hospital



Participant workforce collectively

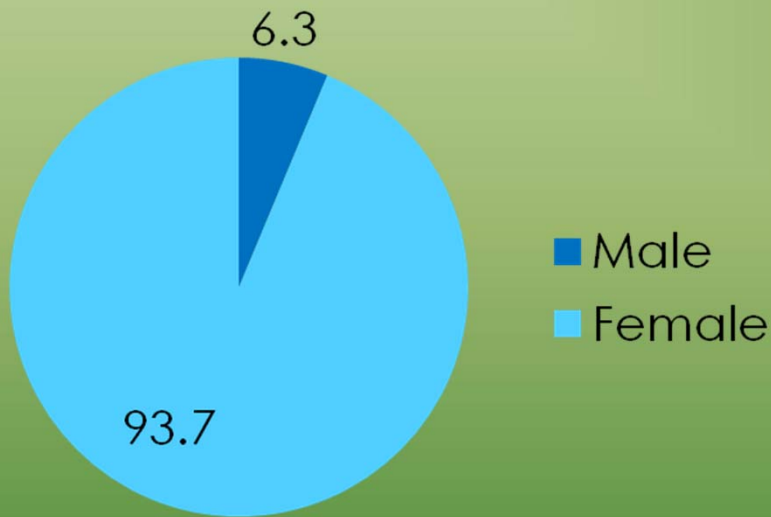
Based upon preliminary data analysis

- Total Potential Number of RNs in our study: **25,630**
- Range of hospital response rates: 17-63%
- Overall Average Response rate: 33%
- Percent of N participating = 29.2%
- Target minimum response rate was 20%*
- Eligible participants in Time 1 workforce data:

7306 (after minus 12 self identified LPN & non RN)

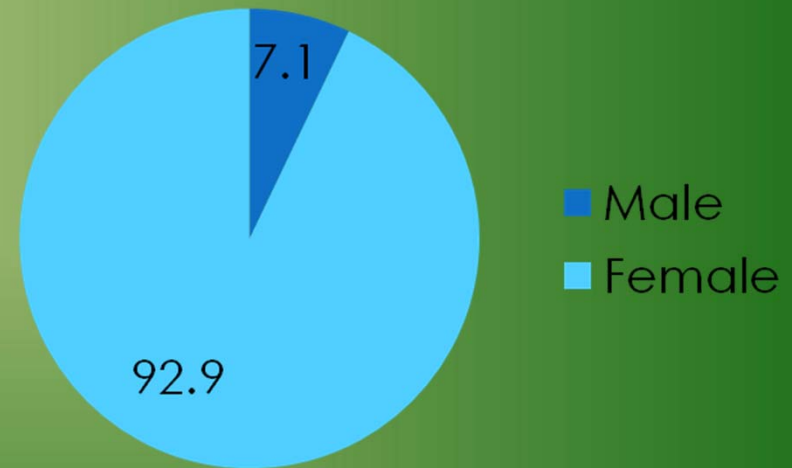
Workforce data: RN Gender & Age

MINC



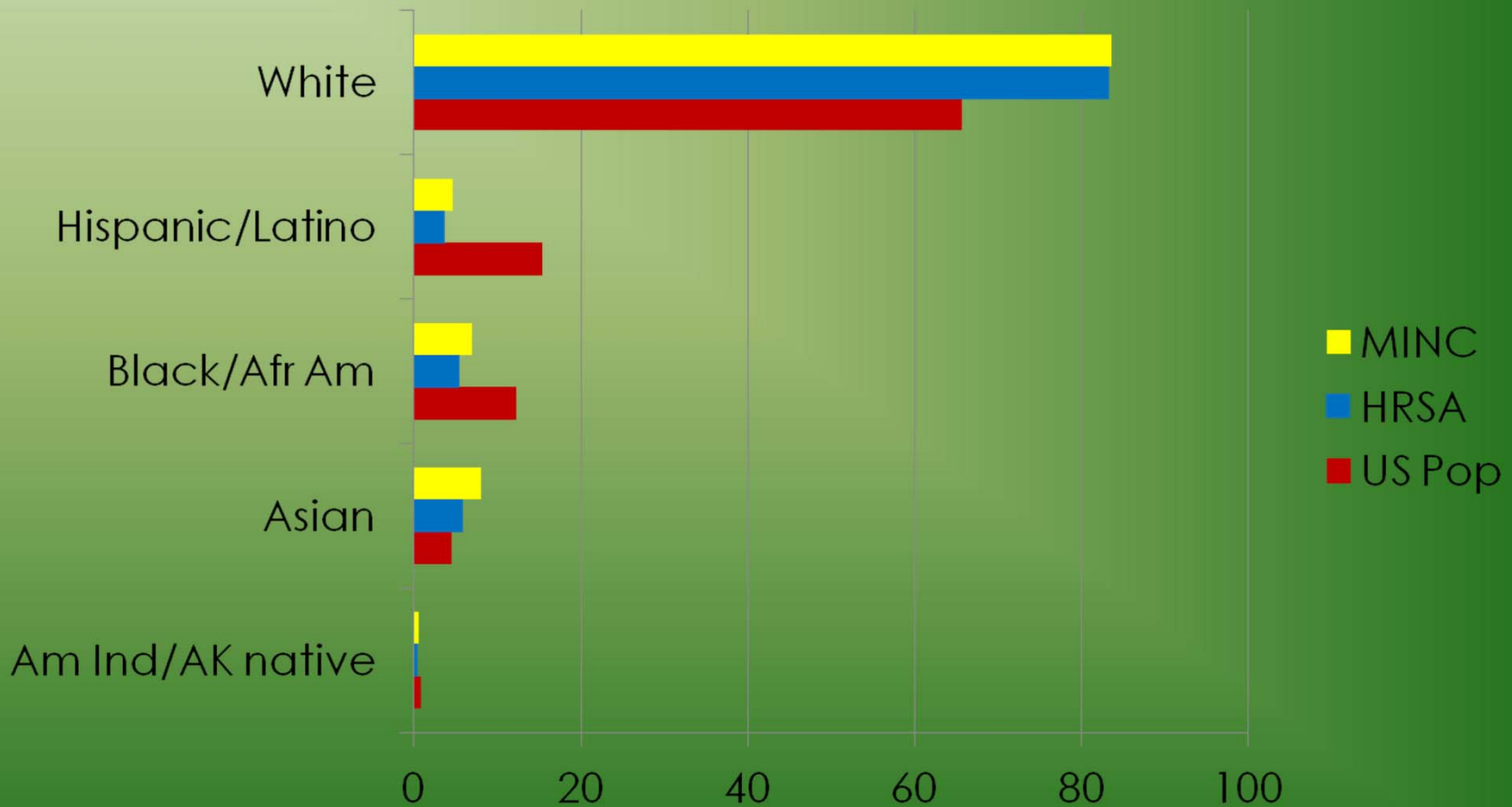
Median Age
45

HRSA

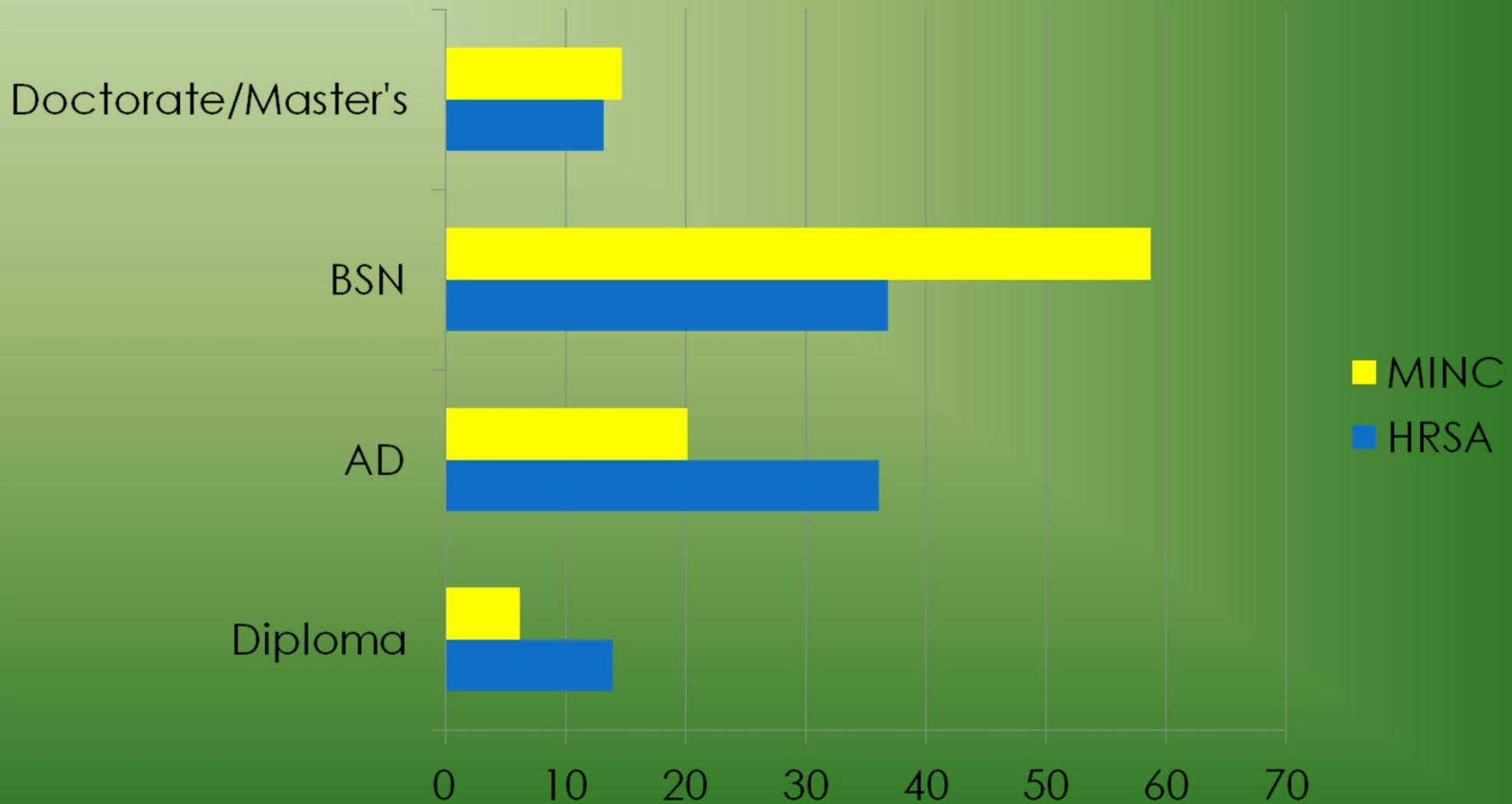


Median Age
46

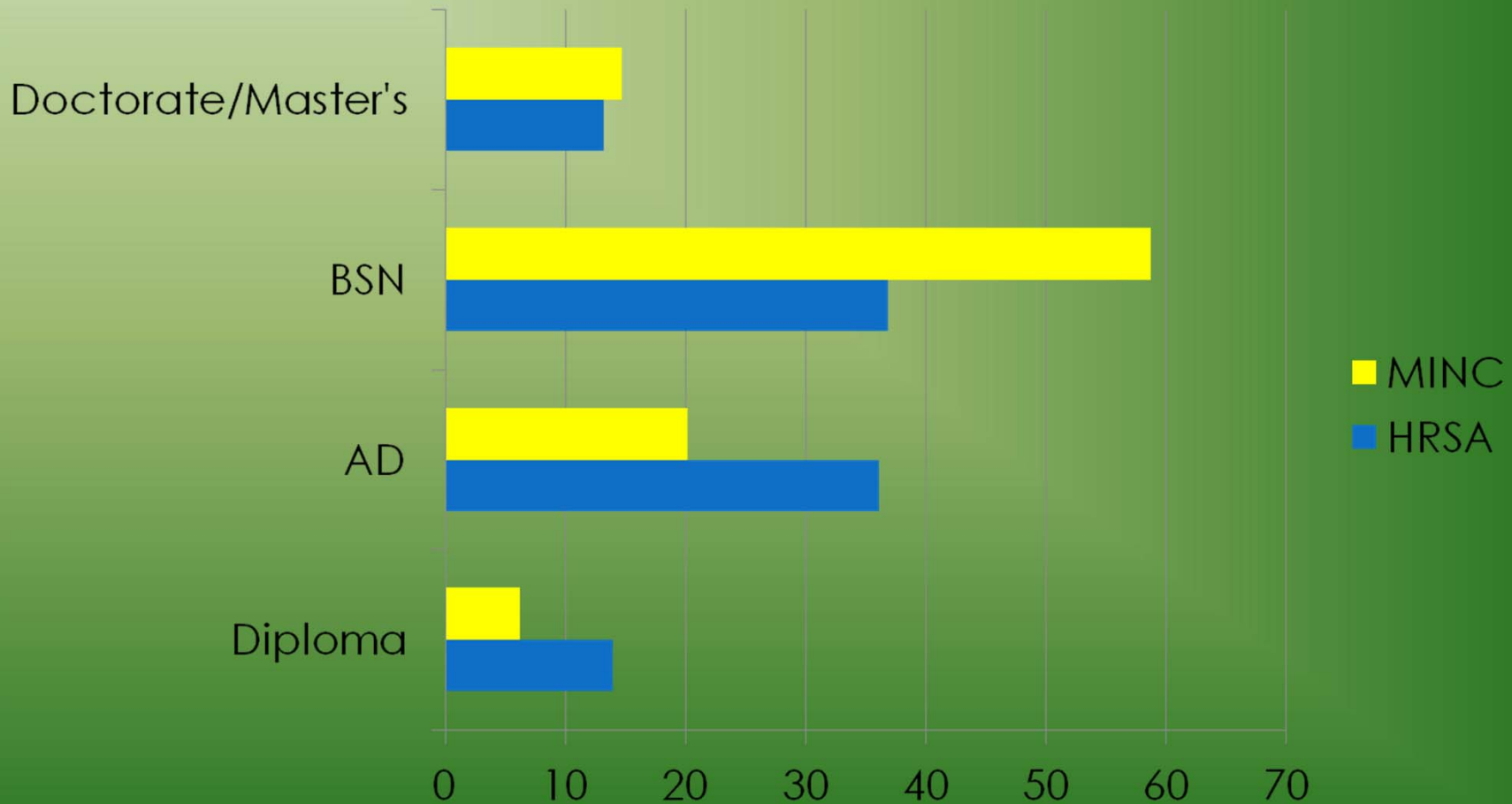
Workforce Data: Distribution of RN & US by race/ethnic



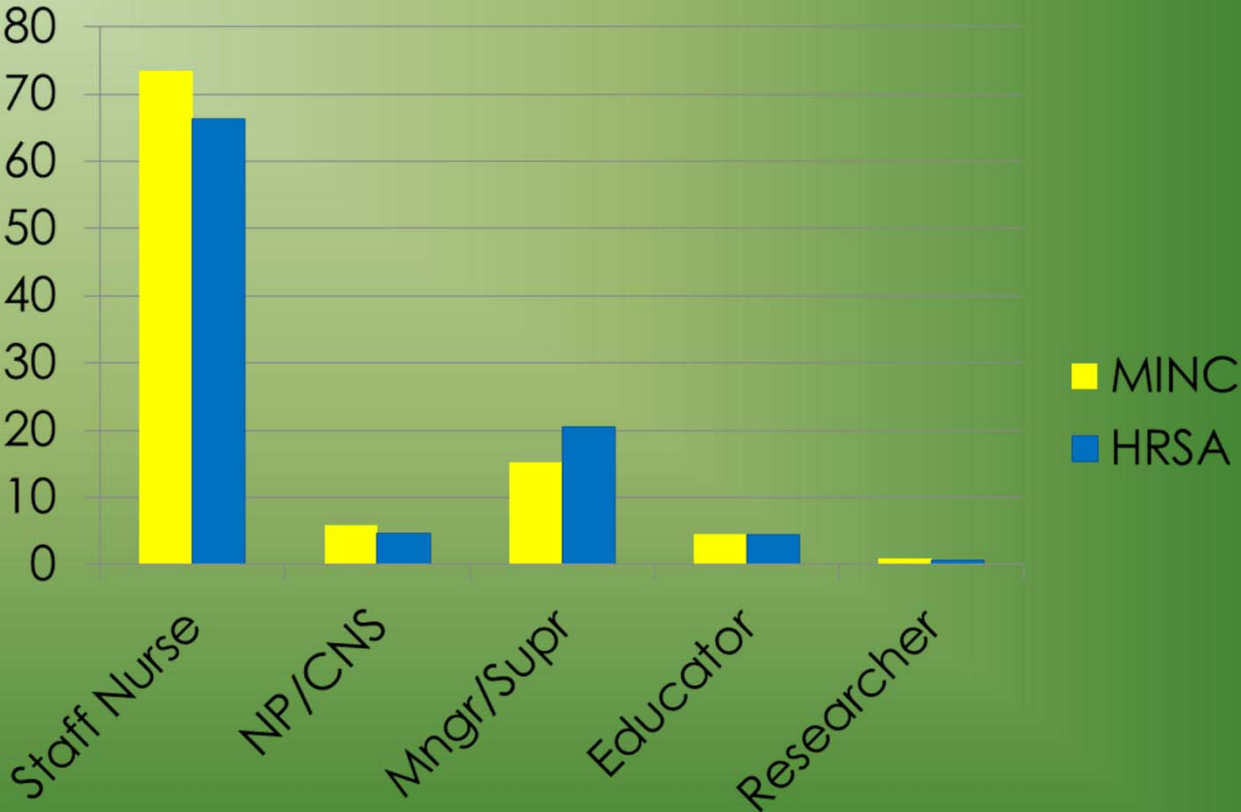
Workforce Data: Highest Nursing Degree



Workforce Data: Highest Nursing Degree



Workforce Data: Primary Area of Practice

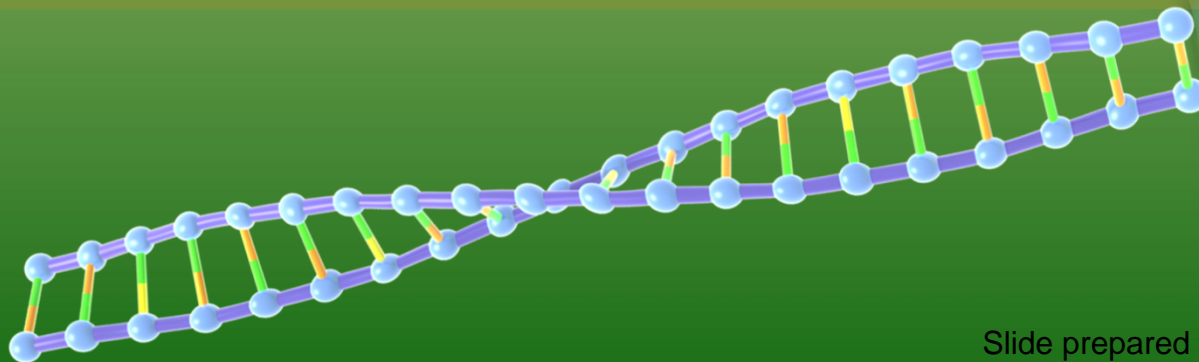


MINC Workforce Experience

Mean number of years in nursing **17**

Median number **16**

Range **1-50**



Summary

Importance of Genomics Education for RNs

Item 1

89.9% say it is important for RNS to become more educated about genetics of common diseases Q2

Item 2

64% plan to learn more about Genomics Q33a
Q3-Why? RNs believe = better patient care

Item 3

RNs prefer a mix of activities--highest preference is for mix of presentations & group activities Q34e

Item 4

55.9% do not think senior staff see genetics as an important part of the nurse's role Q33c

Item 5

50% do not think senior staff see genetics as an important part of their role Q33d

Summary Genomic Education

Qs-6 & 31-5; 32; 32; 30;

Item 1

Expertise of nurses is limited (78.5%)—most confident on confidentiality & least confident on genetic testing

Item 2

52.1% had genetics in their nursing curriculum
They are on average 5 years younger*

Item 3

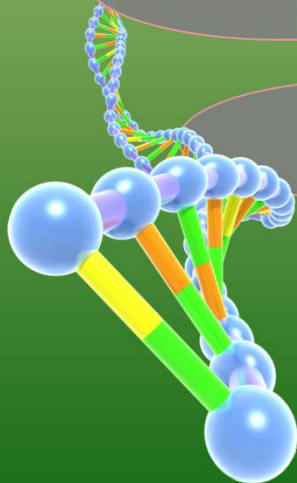
13.3% have attended a course after licensure that included genomics as a major component

Item 4

In general nurse who had genetics in school are on average 5 years younger *

Item 5

Those with genomic education in school or Later more likely know about competencies*



Summary Genomic Practice

Item 1

83% actively see patients (Q8)

limited family history, referral and discussion by RNs

Item 2

71% agree family history taking should be a key component of nursing care (Q7)

Item 3

In the past 3 months 68.5% have rarely or never collected a complete family history (Q9)

Item 4

81.5/81.3% not had a patient initiate discussion about genetics or facilitated referral (Q10,12)

Item 5

64.6% rarely/never use FHx to facilitate clinical decision or recommendations (Q12)

Summary Genomic Knowledge

Clear Knowledge Gaps

Item 1

Knowledge score 8/12 or 66%
In a prior smaller study score was 75%

Item 2

Deeper dives : knowledgeable on basics but the more detailed questions are answered wrong

Item 3

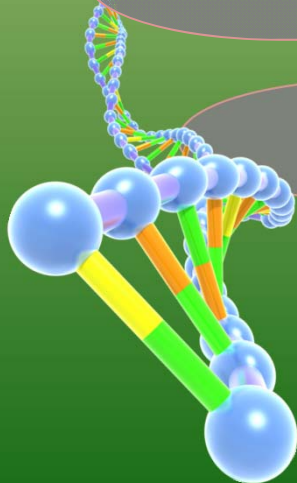
Nursing workforce is not clear on advantages & has misperceptions of disadvantages

Item 4

64% intent to learn more about genomics
And would attend on their own time

Item 5

About half believe they would be able to attend during work hours—rest say no or don't know



MINC Leaders at Avera BHC



Amber Top

Jan Questad

Brita Stange, RN Manager
Amber Top, RN Supervisor
Jan Questad, Clinical Nurse Educator

Purpose of MINC

The primary aim of this research project is to establish and assess the outcomes of a Magnet Hospital Champion year-long intervention to improve the capacity of the institution to integrate genomic information into nursing healthcare delivery.

Achieving the Purpose

- Develop, implement and evaluate a year-long genomic education to increase nursing capacity to integrate genomics through assessments of program satisfaction, and institutional achieved outcomes.
- Evaluate institutional nursing workforce attitudes, practices, receptivity, confidence and competency in genomics of common disease and utilization of family history as a result of the Magnet Hospital Champion effort pre and post intervention.
- Describe the impact of participation in Magnet Hospital Champion effort on policies that support genomic integration including privacy/confidentiality, research, and electronic health records.

Framework of MINC

- ✓ Pre-survey to RNs in July 2012
- ✓ Pre-survey to dyad/triad groups in August/September 2012
- ✓ Amber Top and Jan Questad attended Kickoff event in Washington DC in September 2012.
- ✓ Participate in monthly webinars.
- ✓ Quarterly submission of updated action plans.
- ✓ Two on-site virtual visits with lead investigators.
- ✓ Re-administer survey both to RNs and dyad/triad groups at the end of the intervention year. (July 2013)

How will we implement MINC at Avera BHC?

Seven areas included in our action plan for the integration of genetics and genomics into policy and practice. These include:

- ✓ Personal Development
- ✓ Genetics/Genomics in Practice Assessment
- ✓ Policy Genetic/Genomic Content Assessment
- ✓ Staff Genetic/Genomic Knowledge Needs Assessment
- ✓ Staff Development
- ✓ Plans for Genetic/Genomic Integration
- ✓ Anticipated Obstacles and Challenges

Personal Development

Objective

Review links located on G2C2 regarding behavioral health and genetics or pharmacogenetics and site 3 that could be used to further staff development.

Increase knowledge regarding all genetics services Avera offers.

Attend presentation regarding Individualized Medicine and Genetics.

Gather and share knowledge regarding health and genetics with middle school students.

www.g2c2.org

www.g3c.org

Amber Top and Jan Questad at the
Uniformed Services University.



Genetics/Genomics in Practice Assessment

Objective

Re-assess Behavioral Health RN staff perception and educational needs regarding genetics and genomics as it pertains to practice found on individual units.

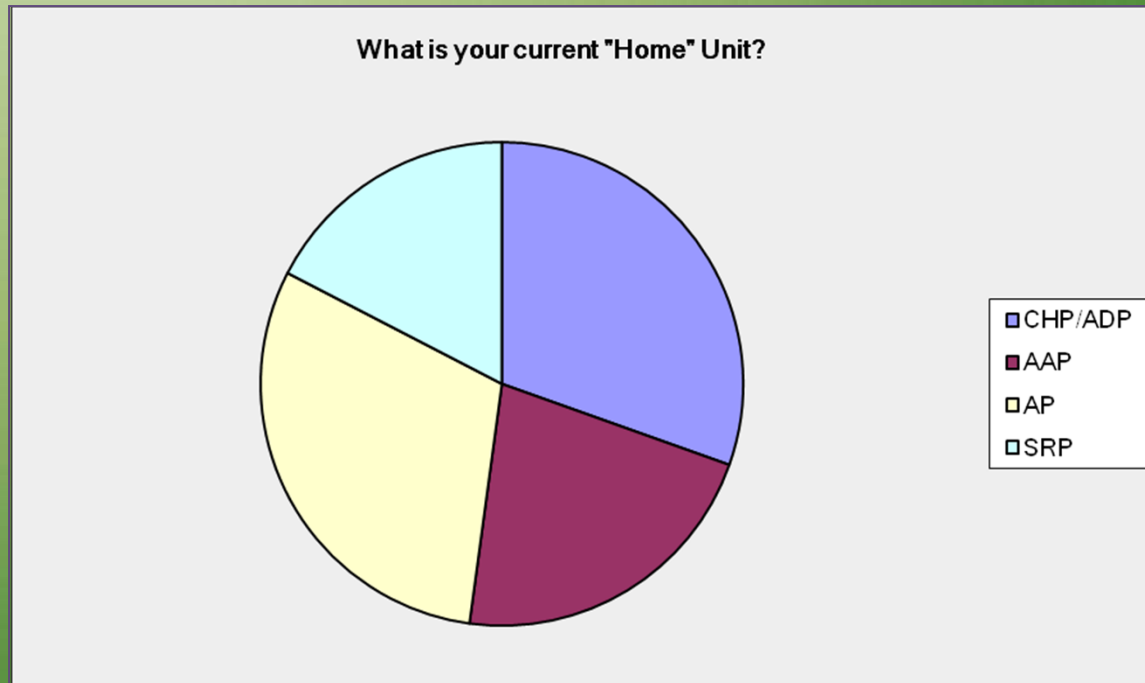
Present MINC process to all BHS RN staff on a monthly basis and hold Q&A session to guide staff through practice change/implementation potential.

Identify connections in practice with other genetics teams in the Avera system.

Connect with local nursing schools to identify their current curriculum to establish an understanding of what is currently taught to new nurses and to explore potential for educational opportunities for our staff.

Explore with local nursing schools the option of nursing students researching evidence based practice regarding genetics and behavioral health.

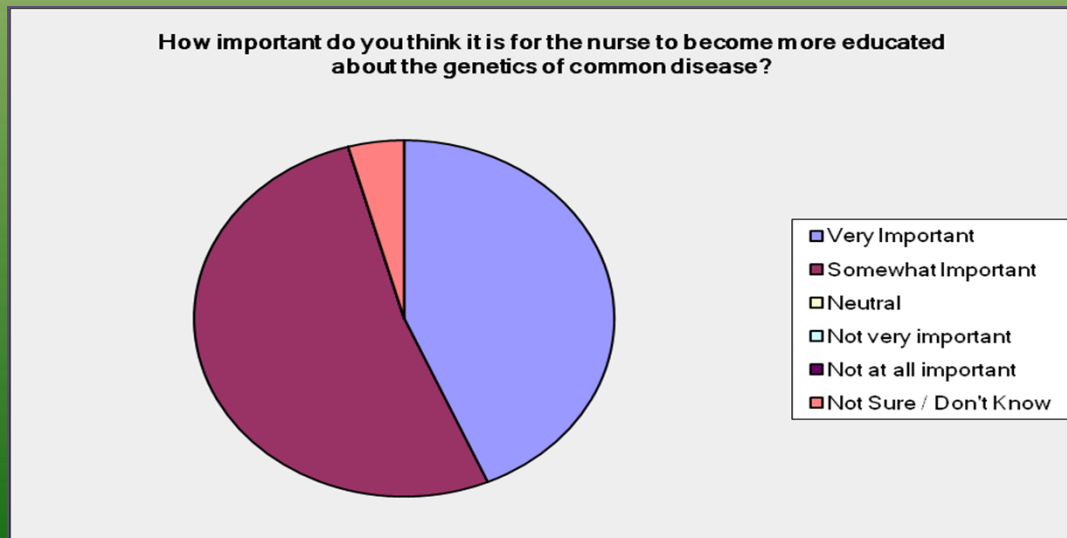
Survey says ...



...equal representation of all units

How important do you think it is for the nurse to become more educated about the genetics of common disease?

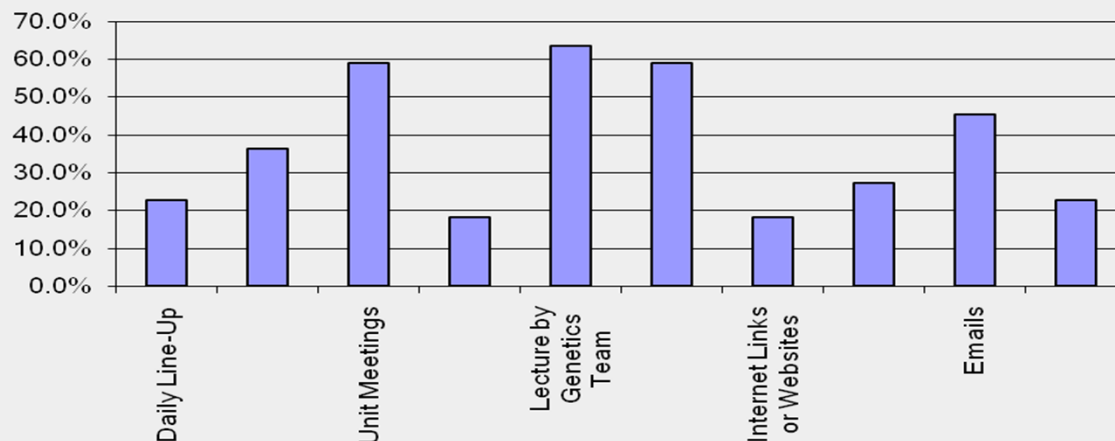
Answer Options	Response Percent	Response Count
Very Important	43.5%	10
Somewhat Important	52.2%	12
Neutral	0.0%	0
Not very important	0.0%	0
Not at all important	0.0%	0
Not Sure / Don't Know	4.3%	1



How do you want to be educated?

Answer Options	Response Percent	Response Count
Daily Line-Up	22.7%	5
Learning Connections	36.4%	8
Unit Meetings	59.1%	13
Reading Research Articles	18.2%	4
Lecture by Genetics Team	63.6%	14
Tour of the Genetics Lab	59.1%	13
Internet Links or Websites	18.2%	4
Posters	27.3%	6
Emails	45.5%	10
Attend Mock Ethics Conference	22.7%	5

We will be planning education in 2013 related to genetics, how would you like to receive this information?



What kind of conversations have you had on the unit regarding genetics?

- Genetics related to diseases such as mental health, diabetes, heart disease, FAS, neurodeficiencies, etc.
- Environmental vs genetics (including family dynamics)
- How likely are the kids to have ADHD if parents do?
- We have had some talks about if certain disorders run in the family, the chance of you getting something if your mom and/or dad had something
- Pharmacogenetics and how genes play in the absorption of different medications...

Why do you think knowledge about genetics is important for nurses to have?

Genetics is important to the field of behavioral health because it could help us learn how to diagnose, treat, and even come closer to curing some mental illness'. May be possible to determine effective drugs for different people and different diagnoses.

Any further research for MH is beneficial. There is not enough!

I believe any extra knowledge that can be learned about psychiatry is important. I also feel it may help improve our treatments for our patients.

So that they can check to see if the medications are working effectively/are properly utilized by their body? I don't really understand it all, but know that it is important.

Policy Genetic/Genomic Content Assessment

Objective

Determine current policies regarding genetic practice available in Avera system.

Evaluate and develop policy drafts specific to Avera Behavioral Health regarding genetics and genomics practice.

Staff Genetic/Genomic Knowledge Needs Assessment

Objective

Re-assess Behavioral Health RN staff educational needs regarding genetics and genomics as it relates to *what more* they would like to know re: genetics to increase their comfort of using it in practice.

Meet with individual unit councils to discuss how genetics/genomics relates to their specific unit.

Staff Development

Objective

Connect all significant education events at Avera Behavioral Health to the overall theme: “2013 ~ Year of the Gene”.

Set up 4 educational options for RN staff to participate in and bring final report on gained knowledge to the Annual Skills Fair (all disciplines attend Skills Fair for annual education)

Connect annual mandatory suicide assessment/awareness training to genetics.

Create poster specific to each Avera BHS unit in regards to genetics/genomics practice to be presented and available at Skills Fair.

Giving Choices to our Nurses

Four options to pick from:

1. **Genetics Lab tours and discussion regarding current projects happening there. (Dates: May 3, 7, and 13)**
2. **In a group, read a journal about the ethics of integrating genetics into health care and participate in discussion following. (Date: June 4)**
3. **On your own – follow a path through several internet links and learn about the importance of family history and genetics. What does this mean in the nursing world? And finally, connect to a link that allows you to create your own family history. (date: sometime before Skills Fair)**
4. **Join with members of Avera McKennans' Ethics Committee and participate in discussion of case studies regarding decisions patients/ caregivers have had to make in relation to ethics and genetics and treatment of disease. (date: TBD)**

Plans for Genetic/Genomic Integration

Objective

Host genetics celebration in the light court.

Discuss opportunities such as Cytochrome P450 testing for patients at Avera Behavioral Health.

Summarize “2013 ~ Year of the Gene” progress at the annual staff retreat.

2013 - Year of the Gene!

Kick Off in the Light Court



2013 - Year of the Gene!

Visiting with Avera Genetics Institute Staff



2013 - Year of the Gene!

Yummy DNA cookies! (150 made – 6 left over)



Anticipated Obstacles and Challenges

Identified Obstacle/ Challenge

Gain financial assistance from at least one grant to help in costs related to educational/celebratory events.

Determine potential for scholarship funds to off-set costs for patients to pay for CYP450 testing.

Determine availability of the genetics team.

It's just the beginning ...



Looking forward to the 5 – 10 year plan!

Resources

- www.G2C2.org
- www.hsc.wvu.edu/son/MINC.aspx
- Caskey, S., (2013). Expanding RN Scope of Practice: A Method for Introducing a New Competency into Nursing Practice (MINC). *Competency Focus*, 1(7), 2-3.

Questions?

