HARNESSING THE POWER OF DATA TO TRANSFORM CARE
HENDERSON HEALTH CARE

Cheryl Brown, CEO
Darcy Ost, RN, BSN, Performance Improvement, Education, Safety, and Risk
OBJECTIVES

• Identify challenges in improving clinical outcomes

• Define how to extract relevant and accurate data from different data sources

• Identify tools and strategies for improving clinical outcomes
HENDERSON, NEBRASKA
HENDERSON HEALTH CARE SERVICES

- 13 bed CAH
- 2 Rural Health Clinics
- 40 bed LTC
- 12 bed ALF
HENDERSON HEALTH CARE SERVICES

- Average daily census of 3.0
- Average 25 surgeries per month
- 55 ER visits per month
- 3 deliveries per month
- Average 900 clinic visits per month
- Average of 185 Specialty clinic visits per month
HENDERSON HEALTH CARE SERVICES

• Care Close To Home
  • Employ 2 MD’s, and 3 PA’s

• Specialty Clinics
  • Orthopedics
  • General Surgery
  • Cardiology
  • Pulmonology
  • Podiatry
  • Oncology
  • Neurosurgery
  • ENT
  • OB/GYN
  • Allergy/Asthma
  • Urology
Nebraska Critical Access Hospitals
64 as of February 2018

Source: Health Professors Tracking Service
Office of Community and Rural Health
Acute Care Facilities Section
Date: February 2018
Location: K-Rural Health Intern(Critical Access Hospitals)CAH 2018

Cartography: Andy Pedley | Community and Regional Planning Intern | DHHS
Far: Thomas Reuter | Primary Care Office Director
thomas.reuter@nebraska.gov | 402-871-0168
OUR INITIAL CHALLENGES

• Lack of Integrated EHR

• Process of Data Collection
EHR IMPLEMENTATION

- Selected a universal platform within the organization
- Identified shortfalls
DATA ANALYTICS PARTNERSHIP

• Investment in Technology
• Customize reports

WHAT FEELS LIKE THE END IS OFTEN THE BEGINNING.
CLINICAL IMPROVEMENT TEAM

• Defined roles and responsibilities; provide education

• Utilized team members strengths, knowledge, and resources
INITIAL QUALITY MEASURES/BENCHMARKS

- Physician Scorecards
- Poorly Controlled Diabetes (A1c >9)
- Overuse of Neuroimaging
- Osteoporosis Screening in Women
- Influenza vaccination
- Controlling Hypertension
- COPD Spirometry Evaluation
- Colorectal Cancer Screening
PROVIDER ENGAGEMENT
<table>
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<tr>
<th></th>
<th>Diabetes</th>
<th>Osteoporosis</th>
<th>Influenza</th>
<th>Hypertension</th>
<th>COPD-Spirometry</th>
<th>Breast Cancer</th>
<th>Colon Cancer</th>
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<td>19%</td>
<td>38%</td>
<td>38%</td>
<td>55%</td>
<td>53%</td>
<td>64%</td>
<td>21%</td>
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<tr>
<td><strong>Sep-19</strong></td>
<td>3%</td>
<td>90%</td>
<td>43%</td>
<td>62%</td>
<td>90%</td>
<td>84%</td>
<td>58%</td>
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<td><strong>Nov-17</strong></td>
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<td>31%</td>
<td>42%</td>
<td>90%</td>
<td>36%</td>
<td>45%</td>
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<tr>
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<td>7%</td>
<td>88%</td>
<td>41%</td>
<td>68%</td>
<td>97%</td>
<td>74%</td>
<td>54%</td>
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<td>29%</td>
<td>50%</td>
<td>28%</td>
<td>43%</td>
<td>50%</td>
<td>38%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Sep-19</strong></td>
<td>6%</td>
<td>86%</td>
<td>36%</td>
<td>67%</td>
<td>100%</td>
<td>72%</td>
<td>42%</td>
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<tr>
<td><strong>Nov-17</strong></td>
<td>7%</td>
<td>28%</td>
<td>41%</td>
<td>83%</td>
<td>26%</td>
<td>42%</td>
<td>20%</td>
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<td>6%</td>
<td>86%</td>
<td>41%</td>
<td>61%</td>
<td>84%</td>
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</table>
GAP REPORTS AND ACTION PLANS

• Data overload
• Validate data
• Identified our missed opportunities/Heightened our awareness of service capture potential
• Created specific tasks lists
• Set goals and objectives
OUR RESULTS ARE IN...

I DON'T ALWAYS GRAPH MY DATA...

OH WAIT, YES I DO!
UNCONTROLLED DIABETES

Poorly Controlled Diabetics

- Percentage
- Decile 9 - LSL
- Decile 10 - LSL
- Linear (Percentage)
OSTEOPOROSIS SCREENING FOR WOMEN

Osteoporosis Screening in Women

- Percentage
- Decile 9 - LSL
- Decile 10

Jan'15-Dec'16
Feb'15-Jan'17
Mar'15-Feb'17
Apr'15-Mar'17
May'15-Apr'17
Jun'15-May'17
Jul'15-Jun'17
Aug'15-Jul'17
Sep'15-Aug'17
Oct'15-Sep'17
Nov'15-Oct'17
Dec'15-Nov'17
Jan'16-Dec'17
Feb'16-Jan'18
Mar'16-Feb'18
Apr'16-Mar'18
May'16-Apr'18
Jun'16-May'18
Jul'16-Jun'18
Aug'16-Jul'18
Sep'16-Aug'18
Oct'16-Sep'18
Nov'16-Oct'18
Dec'16-Nov'18
Jan'17-Dec'18
Feb'17-Jan'19
Mar'17-Feb'19
Apr'17-Mar'19
May'17-Apr'19
Jun'17-May'19
Jul'17-Jun'19
Aug'17-Jul'19
Sep'17-Aug'19
Oct'17-Sep'19
OSTEOPOROSIS SCREENING FOR MEN

![Osteoporosis Screening in Men](chart)

The chart shows the percentage of osteoporosis screenings in men from June 16, 2018, to October 17, 2019. The screening rate increased significantly from December 16, 2018, onwards.
INFLUENZA VACCINATION

Flu Immunization

- Oct'16-Mar'17: 29.00%
- Oct'17- Mar'18: 35%
- Oct'18-Mar'19: 40%

I MUSTACHE YOU A QUESTION

HAVE YOU GOTTEN YOUR FLU SHOT YET?
<table>
<thead>
<tr>
<th>Item</th>
<th>Date:</th>
<th>Insurance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Birth:</td>
<td></td>
<td>Check smoking status each visit***</td>
</tr>
<tr>
<td>Check Height:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunizations due: <strong>children- check NESIS</strong>*</td>
<td></td>
<td>Lab Needed:</td>
</tr>
<tr>
<td>Prevnar (give 1st) age 65+</td>
<td></td>
<td>Hemoglobin A1C (Q3 months/DM)</td>
</tr>
<tr>
<td>Pneumovax (Give 1 full year after prevnar) age 65+</td>
<td></td>
<td>CMP/BMI (Q 6 months/DM/HTN/Diuretics)</td>
</tr>
<tr>
<td>Shingrix ~age 50+</td>
<td></td>
<td>PSA (yearly screening: age 50+)</td>
</tr>
<tr>
<td>Influenza</td>
<td></td>
<td>TSH</td>
</tr>
<tr>
<td>Tdap</td>
<td></td>
<td>Free T4 (Thyroxine)</td>
</tr>
<tr>
<td>Hep B</td>
<td></td>
<td>Spot microalbumin/creatin- urine (yearly for DM)</td>
</tr>
<tr>
<td>Hep A</td>
<td></td>
<td>Lipid Panel (yearly: unless meds adjusted)</td>
</tr>
<tr>
<td>Gardasil</td>
<td></td>
<td>Vitamin D (prior auth if insured-not medicare)</td>
</tr>
<tr>
<td>Tests:</td>
<td></td>
<td>Other lab:</td>
</tr>
<tr>
<td>Mamo (yearly age 40-75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dextra -W (age 65 and up- q 2 years) Men over 70</td>
<td></td>
<td>Prolia/Reclast orders</td>
</tr>
<tr>
<td>HCM/Annual px; Male or Female</td>
<td></td>
<td>Medicare Wellness Exam: Welcome Initial  Subsequent</td>
</tr>
<tr>
<td>Last Pap (females):</td>
<td></td>
<td>Depression Assessment:</td>
</tr>
<tr>
<td>Eye Exam (DM-yearly)</td>
<td></td>
<td>Fall Risk Assessment:</td>
</tr>
<tr>
<td>Foot exam (DM- each time)</td>
<td></td>
<td>Mini Mental Exam</td>
</tr>
<tr>
<td>Low dose lung CT (age 55-77-30 pack history, no s/s, smoker or quit in last 15 years)</td>
<td></td>
<td>Pain Contract Compliance Visit: Due for drug screen</td>
</tr>
<tr>
<td>Colonoscopy or Cologuard (age 50-75)</td>
<td></td>
<td>Transition of Care Date:</td>
</tr>
<tr>
<td>Other tests:</td>
<td></td>
<td>Chronic Care Management Visit</td>
</tr>
<tr>
<td>PFT (if diagnosis of COPD or smoker)</td>
<td></td>
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</tr>
<tr>
<td>CXR (pre-op within 6 months of surgery as if indicated)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EKG (pre-op if over 50- within 6 mon. of surgery)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Notes                     |             |                             |
HYPERTENSION

Percentage of hypertensive patients in Decile 4 and Decile 5 over the last year.
COPD SPIROMETRY EVALUATION

COPD Spirometry Evaluation

Jun 15-Nov 17
Jun 15-Dec 17
Jun 15-Jan 18
Jun 15-Feb 18
Jun 15-Mar 18
Jun 15-Apr 18
Jun 15-May 18
Jun 15-Jun 18
Jun 15-Jul 18
Jun 15-Aug 18
Jun 15-Sep 18
Jun 15-Oct 18
Jun 15-Nov 18
Jun 15-Dec 18
Jun 15-Jan 19
Jun 15-Feb 19
Jun 15-Mar 19
Jun 15-Apr 19
Jun 15-May 19
Jun 15-Jun 19
Jun 15-Jul 19
Jun 15-Aug 19
Jun 15-Sep 19

Percentage  Decile 7 - USL  Decile 8 - USL
DALE’S STORY
COLORECTAL CANCER SCREENING

Colon Cancer Screening

[Graph showing Colon Cancer Screening percentages for different periods, with lines indicating Decile 7-LSL and Decile 8-LSL.]
BARNEY- THE MAILER CAUGHT HIS EYE!
Henderson Health Care
March 5

Did you know?

Overall, the lifetime risk of developing colorectal cancer is about 1 in 22 for men and 1 in 24 for women.

Don’t be the one. Schedule your colonoscopy today for a chance to win a weekend getaway!

Call HHC at (402) 723-4512 or Sutton Family Practice at (402) 773-2130
BREAST CANCER SCREENING

Breast Cancer Screening

Percentage

Decile 8 - USL
Decile 9 - USL
BREAST CANCER SCREENING

Henderson Health Care
October 1, 2018

Breast cancer affects 1 in 8 women in the United States. However, the survival rate is 90% when the cancer is caught early and treatment is received. New digital 3D technology makes earlier diagnosis and treatment possible.

Breast cancer recurrence is a concern for many who have been treated for breast cancer. New technology produces clearer images with enhanced details which gives a more accurate view of the tissues.

Digital 3D mammography has been proven to detect breast cancer sooner, provide more accurate results and reduce unnecessary callbacks.

Henderson Health Care employs two radiologic technologists who are certified in mammography. Corrine Prisdon and Jennifer Chervinsky both received their mammography certification from the American Registry of Radiologic Technologists.

It is recommended women receive annual mammograms beginning at age 40. If you're at high risk, have a strong family history, or have had radiation treatment to the chest, the recommendation may range from age 35 to age 50. Call Henderson Health Care at (602) 735-6132 to schedule your breast cancer screening with one of our certified mammography technologists.

Do not want to get your screening? The best procedure is early detection.
LORI’S STORY
**HEALTH PROMOTIONS/SCREENINGS**

**Henderson Health Care**

**Monday-Saturday**
**February 11-16, 2019**
**7:00 - 8:30 a.m.**
at Sutton Family Practice & Henderson Health Care

**TESTS AVAILABLE:**
- Comprehensive Blood Test: $40
- Prostate Specific Antigen: $20
- Thyroid Stimulating Hormone Test: $20
- Hemoglobin A1C: $20

Register at the clinic front desk.
No appointment needed.
You should be fasting prior to your blood draw, but are encouraged to drink plenty of water.

**Mobile Screening Services by Bryan Health**
Henderson Health Care - February 12
Sutton Family Practice - February 13
Abdominal Aortic Ultrasound Screenings: $40.00
Peripheral Arterial Disease: $20.00
Atrial Fibrillation: $10.00
Carotid Artery Ultrasound Screening: $40.00

Appointments are needed for this Bryan Health testing.
Henderson (402) 723-4512  Sutton (402) 723-2100

**Henderson Health Care**

**RECOMMENDED SCREENINGS AND IMMUNIZATIONS FOR ADULTS**

**WOMEN**

**AGE 21**
- Physical Exam
- Pap Smear
- Repeat every 3 years

**AGE 40**
- Mammogram
- Yearly

**AGE 50**
- Colonoscopy
- Repeat every 10 years
- DEXA Scan
- Repeat every 2 years

**AGE 65**
- Recommended immunizations (women):
  - Pneumonia
  - Shingles
  - Tetanus
  - Pertussis
  - Hepatitis A
  - Influenza
  - Hepatitis B
  - Ask your provider or nurse if you are up-to-date.
  - It is also recommended to have cholesterol and fasting blood sugar tested yearly.

**MEN**

**AGE 21**
- Physical Exam

**AGE 50**
- Colonoscopy
- Repeat every 10 years
- DEXA Scan
- Repeat every 2 years

**AGE 70**
- Recommended immunizations (men):
  - Pneumonia
  - Shingles
  - Tetanus
  - Pertussis
  - Hepatitis A
  - Influenza
  - Hepatitis B
  - Ask your provider or nurse if you are up-to-date.
  - It is also recommended to have cholesterol, fasting blood sugar and PSA tested yearly.

This is a general timeline. Individual needs may vary based on risk factors and/or family history. Discuss these with your provider.

**TRAIN YOUR BRAIN**

**Featuring MARTY WOLFF**

**FOR WEIGHT LOSS**

**TWO OPTIONS THIS YEAR!**

**10 WEEK COURSE**
Classes every Monday
January 14 through May 20, 2019
Cost: $99

**TYB JUMBO**
Attend classes on Jan. 14th, Feb. 25th, April 12th, & May 20th
(first option for TYB veterans in need of accountability)
Cost: $50

**BUY 1, GET 1!**
One class includes private weight loss with Marty’s support.
Season 3 Contestant

Henderson Health Care Sutton Family Practice

Join us on January 14th to sign up.
Marty Wolff will speak at 6 p.m. Initial weights and measurements will be taken starting at 5:45 p.m. and continue after Marty’s presentation. Classes will be held at Mennoite Brethren Church 1201 11th Street Henderson, NE

Questions? Contact Ashley Freeman, RD/ LMT at (402) 723-4038 or ashleyfreeman@hendersonhealth.org
## Financial Impact

### DEXA Scan

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<tr>
<th>Year</th>
<th>Count</th>
<th>Revenue</th>
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<td>96</td>
<td>$40,017</td>
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<tr>
<td>2018</td>
<td>163</td>
<td>$70,559</td>
</tr>
<tr>
<td>2019</td>
<td>225</td>
<td>$110,137</td>
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### Colonoscopy

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>Revenue</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>66</td>
<td>$155,072</td>
</tr>
<tr>
<td>2018</td>
<td>72</td>
<td>$166,171</td>
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<tr>
<td>2019</td>
<td>97</td>
<td>$222,226</td>
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### Mammogram

<table>
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<tr>
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<th>Count</th>
<th>Revenue</th>
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<td>2017</td>
<td>136</td>
<td>$34,003</td>
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<tr>
<td>2018</td>
<td>319</td>
<td>$93,116</td>
</tr>
<tr>
<td>2019</td>
<td>738</td>
<td>$166,121</td>
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OUR LESSONS AND TAKEAWAYS

• Evaluate our data resource tool
• Determine our baselines so we can measure improvement
• Set goals and develop action plans
• Educate ourselves and team members
• Be creative, capitalize on each team member’s strength, knowledge, and resources
• Embrace change
• Celebrate and promote our success
BOTTOM LINE ... WE ARE SAVING LIVES!
QUESTIONS?

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