ANIA-GDV 2020 CONFERENCE

PANEL PRESENTATION - MODERATED BY KARLA BEDEN RN, MSN
Cathy Zetterman is a Lead Clinical Informaticist with the Cerner Corporation at Einstein Healthcare Network in Philadelphia. Her informatics work is focused on the ambulatory practices. She graduated from the University of Maine with her Associate Degree in Nursing in 1987. In her 24 years as a bedside nurse, she’s worked in every size hospital and on most every type of unit including travel nursing for 12 years. Cathy started working in Clinical Informatics in 2012 and is passionate at advocating for and supporting all end-users. She’s currently attending Southern New Hampshire University majoring in Data Analytics. Her mantra is ‘be flawsome...perfectly imperfect’.
Empowering Clinicians

How monitoring analytics promotes efficiency and satisfaction.

Cathy Zetterman RN
Lead Clinical Informaticist @ Einstein Medical Center
Question...

Should Clinical Informatics use analytics?
Do you advocate?

Then, absolutely!
What do we do first? Who gets our time? Can we do it all? Are you confused?
Keep it simple!
Goal

Einstein’s goals were to get providers “home for dinner” by improving their adoption and efficiency within the record, and get their after hours time below 20%.
What was Einstein’s approach? How was it measured?

Objective:
- Analytics tools
- Observations
  - Favorites
  - Person-level preferences
  - Ease of navigation
- Surveys

Subjective:
- Personal Feedback
- Questions and/or responses
  - “How do you feel you get around the record?”

Know your tools:

Summary

<table>
<thead>
<tr>
<th>Daily Potential Savings</th>
<th>Adjusted Time/Patient</th>
<th>Actual Time/Patient</th>
<th>% After Hours</th>
<th>Patients Seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:05 hrs:min</td>
<td>29:58 mm:ss</td>
<td>27:44 mm:ss</td>
<td>47.85%</td>
<td>295 patients</td>
</tr>
</tbody>
</table>
Interactions

- Prepare
  - Advance
  - LON
  - Session Recorder
- 1:1
  - Observation
  - Goals
  - Human interaction
- Post Review
  - Advance
  - LON
  - Session Recorder
Next Steps...

- Are you done?
- Do you repeat?
- How do you decide?
- How many times have they been seen?
- Do they want to continue with interactions?
Dr. Sharon Rainer is an Assistant Professor of nursing at Thomas Jefferson University College of Nursing and is an experienced Emergency Nurse Practitioner and telehealth practitioner in emergency and primary care. Her work involves improving access to care through the use of technology. With over 15 years working in both emergency care and providing primary health care to home bound older adults, she has a keen interest in making technology palatable and effective for both patients, providers and the health care system. Through her teaching role, she is engaged in educating the next generation of nurse practitioner and implementing new programs and use cases for telehealth. She has developed several training modules for use across the graduate nursing curriculum and is actively engaged in research to further the study of telehealth access and equity for home bound older adults. She is developing digital competencies for telehealth for Family Nurse Practitioner students and embedding a Telehealth boot camp into both the family NP and Emergency NP programs. Nationally she serves as the Chair of the Policy and Advocacy Committee for the American Academy of Emergency Nurse Practitioners. She regularly contributes articles and talks on merging patient and provider needs for digital health.
Telehealth in Emergency Care

Sharon R. Rainer, PhD, APRN, ANP-BC, FNP-BC, ENP-C
Assistant Professor
Director, Family-Individual Across the Lifespan Program
Co-Director- Emergency Nurse Practitioner Program
Emergency Care & Telehealth Perfect together
Telehealth and EM

Obvious connections from lessons learned from COVID

1. If you don’t maximize use of telehealth you can’t rapidly scale it up in a disaster.
2. Emergency providers & Telehealth – Perfect Match
   Our practice is such that we tolerate uncertainty and often make decisions with far from perfect data.

New Opportunities to grow Telehealth programs-
Pre – ED
In the ED
Post ED

Also working on researching impact
And training the next generation
Tele- Intake (Tele-triage)
• Dramatically decreases LWBS (5 down to 1% since implementation of the program over past 2 years
• Door to Provider approx. 9 minutes
• 1 Provider – 2 hospital ED

• Virtual Rounds – mainly due to COVID- involve families in care

• Critical Care and Specialty Consultation Services- Neuro/ Stroke Covers 38 hospitals

Emergency Programs (Pre ED and During ED)
Post Discharge Program (Less ED Providers)

- Post Discharge E management
  - Decrease readmissions
  - Increase treatment compliance and engagement
- Remote Monitoring
  - Decreased Admission
- E-Visits
  - Convenience
  - Increase engagement
- ON-Site Clinics
- Urgent Care (Virtual and In-Person)
  - Prevent ED use
  - Increase timeliness, convenience and access
  - Decrease risk of becoming Emergent

Vital ED
- Preventable ED Use
- Comprehensive Access
- Risk of care delays; admission
• Domains and Subdomains of the telehealth measurement framework
  • National Quality Forum – Creating a Framework to Support Measure Development for Telehealth (2017)

  • Access to care
  • Financial Impact/ Cost
  • Experience
  • Effectiveness
Overriding Philosophy of Telehealth in the ED

- Telehealth – not about technology but rather about the work flows and operations
- Telehealth IS a care delivery model - no better/no worse than face to face.
- EM is the same
- The appropriate comparator is the alternative – which for most patients is No Care. Not the in-person visit.
- You are doing a physical exam
- You may get more information- Seeing patient in their HOME!
Interprofessional Collaboration

• **DRIVE BY**- consult does not do face to face – Attending only/billable

• Formal CMS measure

**Zoom rooms** – PUIs – consultations and patient families using IPad
Quality Care - Statement to drive us forward

- Our obligation is to provide quality care. I think we all can agree that it does not matter whether that care is provided on the third or fifth floor of a medical complex, is documented in the HER, is preformed by a clinician wearing contact lenses or glasses, or whether the patient lives nearby or far away. Similarly, it should not matter whether the care that was provided was rendered via telehealth or in person.

- QUALITY of CARE is QUALITY CARE

  - Dr. Judd Hollander
    - SAEM20 Conference
Research & Education

- ENP program- Telehealth Boot Camp
- Family NP program – Tele triage here to stay, urgent care
- Study what we are doing and dedicate ourselves to train the next generation of providers.
Karen Zombolas is a Senior Clinical Informaticist with the Cerner Corporation at Einstein Healthcare Network in Philadelphia. Her informatics work is focused on the hospital’s ICUs and stepdown units. She has worked as a Surgical and Cardiothoracic intensive care unit nurse and has experience in Risk Management, Research, Performance Improvement and Patient Safety. Due to her lifetime love of learning, she earned her MHA, restarted her career as an IT analyst, received her Informatics Board certification in 2015 and later moved into the Informatics role. Her enthusiasm for informatics derives from connecting with clinical staff, educating and actually hearing their EMR pain points and developing creative solutions.
Technology, Informatics & Quality: Critical Care

The A2F Bundle

Karen Zombolas BSN, MHA, RN-BC
Sr. Clinical Informaticist
Cerner ITWorks at Einstein
A2F Bundle

- Society for Critical Care Medicine’s ABCDEF (A2F) Bundle

- IHI Bundle Definition - set of evidence-based practices performed collectively that improve patient outcomes.
Critical Care History

- Ghost of CC Past – 1990s
- 2010 - Post-Intensive Care Syndrome (PICS)
Critical Care
Future

• CC Present & Future
# A2F Bundle - Society for Critical Care Medicine

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Monitoring Tools</th>
<th>Care ABCDEF Bundle</th>
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</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Critical-Care Pain Observation Tool (CPOT)</td>
<td>A: Assess, Prevent and Manage Pain</td>
</tr>
<tr>
<td></td>
<td>NRS Numeric Rating Scale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BPS Behavioral Pain Scale</td>
<td>B: Both Spontaneous Awakening Trials (SAT) and Spontaneous Breathing Trials (SBT)</td>
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<td></td>
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<tr>
<td>Agitation</td>
<td>Richmond Agitation-Sedation Scale (RASS)</td>
<td>C: Choice of Analgesia and Sedation</td>
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<tr>
<td></td>
<td>Sedation-Agitation Scale (SAS)</td>
<td></td>
</tr>
<tr>
<td>Delirium</td>
<td>Confusion Assessment Method for the Intensive Care Unit (CAM-ICU)</td>
<td>D: Delirium: Assess, Prevent and Manage</td>
</tr>
<tr>
<td></td>
<td>Intensive Care Delirium Screening Checklist (ICDSC)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>E: Early Mobility and Exercise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F: Family Engagement and Empowerment</td>
</tr>
</tbody>
</table>
IT and Bundle Implementation

- Sufficient IT Resources is critical

- Seamless bundle incorporation in EMR
  - Barrier - documentation burden – includes multiple Assessments and Safety

- Track bundle-related process and outcome metrics
Citations


QUESTIONS
LONG TERM CARE
EILEEN DAMICO RN, BSN-BC

Eileen is a BSN who has been working in informatics for the last 18 years. The last 14 have been spent implementing an EHR and other clinical systems in a long-term care setting. Eileen is also board certified in informatics. Prior to a full-time career in informatics, Eileen worked in Hospice in positions ranging from staff nurse to Director. During her work in Hospice Eileen had her first taste of working with the implementation of an EMR. Eileen has done presentations on both the regional and national level, including NJ HIMS, Delaware Valley Nursing Computer Network (DVNCN), annual software vendor User Group and AAHSA. Eileen is active in multiple committees of GDV-ANIA and chairs the networking committee. She is past president of GDV-ANIA.
Citations

1. https://www.google.com/search?q=icu+pictures&rlz=1C1OKWM_enUS797US797&source=lnms&tbm=isch&sa=X&ved=2ahUKEwib5c3zkPHrAhVUZc0KHfc9BHsQ_AUoAXoECAQQAw&biw=1163&bih=525#imgrc=S4m1bHSGF_WclM

2. https://www.google.com/search?q=walking+intubated+patient&tbm=isch&ved=2ahUKEwiutuiH_PDRAhXFBN8KHY4EClAQ2-cCegQJABAA&oq=walking+intubated+patient&gs_lcp=CgNpbWcQAzICCAA6BQgAELEDOgQIABDDOgclABCxAxBDQgYIABAIIE5QysQEWIf2BGcf-gRoBHAeACAAAilAYsPkgEEMjguMZgBAKABAaoBC2d3cy13aXotaW1nwAEB&sclient=img&ei=_L5jX67JcWJ_AaOiaCACA&bih=525&biw=1163&rlz=1C1OKWM_enUS797US797#imgrc=Cn7l6rHr8lKALM
Long Term Care’s Role in the Continuum of Care
Referrals – Where do they come from?

• Hospital

• Skilled Nursing Facilities

• Assisted Living

• Our own Communities

• Word of Mouth
Referrals – How do we receive them?

• Electronic Referral Platforms
• eFax
• Fax
• Phone Calls
Referrals - Challenges

• Receiving all of the medical information needed to:
  – Determine if we can adequately care for the patient.
  – Determine if the patient has a skilled need.
  – Prepare to care for the patient.
  – Complete federally mandated documentation.
Resident/Patient Care & Technology

• Patient – Sub-Acute Rehabilitation
  – Coming from acute care setting
  – Familiar with clinicians utilizing an EHR

• Resident – Long Term Care
  – Unit will become their home
  – Technology can seem intrusive
EHR - Benefits

• 14 years – long time for LTC
• Allows quick access to resident’s chart by all clinicians
• Documentation is easy to read
• Can send orders to the pharmacy electronically
• Access to hospital records
• Interfaces with referral platforms
EHR - Challenges

• Functionality is well behind that of Acute Care.
• Some drawbacks are related to our setting.
• Lab, Pharmacy, X-Ray are all external and require interfaces.
• There is still paper that requires scanning.
• Medical Directors are independent contractors with their own EHRs.
Communication

• Patient Portal – we do not have access to one at this time.

• The EHR does make communicating information to family more efficient
Discharge

- Assisted Living
- Independent Living Apartment
- Community
- Home Care
- Hospital
- Discharge Summary & Med List printed and given to resident/caregiver
- Signed and scanned back into the EHR.
- In the near future we’ll have an electronic signature
Technology & LTC

The LTC part of the continuum has seen technology grow significantly. However there is still a tremendous opportunity for growth and development.
QUESTIONS FOR THE PANEL
To be answered by each panelist in the context of their setting:

1. Describe how a person would enter your setting, move through it and transition along the continuum of care. How does technology assist or interfere with this process?

2. How does technology contribute/detract from the patient experience in your setting?

3. What are some of the challenges encountered in your setting?

4. How is communication supported (among the healthcare team, with family, etc)?