IS HOSPITAL DISCHARGE DAY OF THE WEEK ASSOCIATED WITH MEASURES OF CARE CONTINUITY FOR STROKE PATIENTS?

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Stacy Lender, Diane Nutter, Ohio Dept. of Health
On behalf of the Ohio Coverdell Stroke Program
Funding and Disclosures

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- **ODH**: Ohio Department of Health provides state general revenue funding to the Coverdell Stroke Program, including funding to Duke University.

*Janet Bettger is a consultant to the Ohio Dept. of Health*
Background

• Average length of acute hospital stay = 4 days
• 50% of patients are discharged home
• Stroke patients are at a significant risk of discontinuous care and consequently adverse events
• Follow-up with primary or specialty care after an acute hospitalization reduces readmission
• National stroke registries do not include data to support QI for care coordination, continuity and transitions
Ohio Coverdell Stroke Program

• Funded primarily by CDC as part of the Paul Coverdell National Acute Stroke Registry (PCNASR) to improve the quality of acute stroke care

• ODH is one of three state health departments funded by CDC from 2012-2015 to expand PCNASR to improve the quality of stroke patients’ care transitions from acute to post-acute care settings

• Data driven QI using “Ohio Special Initiatives Tab” and “Coverdell” overlays (added modules) to GWTG-Stroke

• 48 hospitals participating in Ohio
Learning from our HF peers

• For other disease states, follow-up with primary or specialty care is known to facilitate care continuity and reduce hospital readmissions
  • part of discharge planning bundle
# Designed Performance Measures for Stroke Patient Follow-up

<table>
<thead>
<tr>
<th>Measure Name:</th>
<th>Follow-up with Neurology or Neurosurgery (specialty care) for patients discharged home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Percent of patients with an ischemic stroke or TIA or intracerebral hemorrhage or subarachnoid hemorrhage who have documentation at the time of hospital discharge of a scheduled appointment with specialty care for patients discharged home</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Patients had a referral for a follow-up appointment after hospital discharge with neurology or neurosurgery ordered or recommended AND Patients had an appointment scheduled with neurology or neurosurgery</td>
</tr>
<tr>
<td>Denominator Inclusion:</td>
<td>Patients with a diagnosis of Ischemic Stroke or TIA or Intracerebral Hemorrhage or Subarachnoid Hemorrhage who were discharged home</td>
</tr>
<tr>
<td>Denominator Exclusions:</td>
<td>Age &lt; 18 years, Comfort Measures Only documented, Discharge Disposition of hospice at home or in a health care facility, another acute care facility, other health care facility, left AMA, expired, not documented or unable to determine, Not admitted</td>
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<tr>
<th>Measure Name:</th>
<th>Follow-up with PCP for patients discharged home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Percent of patients with an ischemic stroke or TIA or intracerebral hemorrhage or subarachnoid hemorrhage who have documentation at the time of hospital discharge of a scheduled appointment with primary care provider for patients discharged home</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Patients who had a PCP appointment scheduled OR Patients who did not have a PCP prior to hospitalization and had a PCP assigned and had an appointment made with the new PCP</td>
</tr>
<tr>
<td>Denominator Inclusion:</td>
<td>Patients with a diagnosis of Ischemic Stroke or TIA or Intracerebral Hemorrhage or Subarachnoid Hemorrhage who were discharged home</td>
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For more about this project, visit Poster 291 (Lender et al.) on Thursday.
Strategy for Improvement

- Adapted version of the Institute for Healthcare Improvement’s (IHI) Breakthrough Collaborative Model
  - hospitals identify, plan and implement organizational processes to schedule recommended follow-up specialty care appointments for stroke patients prior to hospital discharge
- 3 full-day meetings with participating hospitals to plan, share best practices, peer-support to strategize around barriers, celebrate little wins
- 6 webinars
- Customized quarterly data feedback reports to each hospital
PHENOMENAL SUCCESS
from quarter 1 to quarter 4

- Neurology follow-up appointments scheduled for patients discharged home and other healthcare facilities increased 75%
- Primary Care Provider follow-up appointments scheduled for patients discharged home increased 92%
April 2013-March 2014 (N=5,302 patients)

12 mo. Median

Collaborative Launch
Still Room to Improve…

What was the most commonly reported system barrier?

→ Most primary care and specialty offices are closed on weekends.
### 3rd Quarter Data Showed:

<table>
<thead>
<tr>
<th>Appointment to be Scheduled</th>
<th>Weekday discharge</th>
<th>Weekend discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care</td>
<td>16.4%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Specialty care</td>
<td>29.6%</td>
<td>17.5%</td>
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</table>

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Ohio Coverdell Stroke Program
Percentage of Follow-up Appointments Made by Day of the Week Discharged
Discharge Dates from April 1, 2013 - December 31, 2013

PCP Follow-Up Appointment Made
Neurology Follow-Up Appointment Made for Patients Discharged to Home
Neurology Follow-Up Appointment Made for Patients Discharged to Other Health Care Facility
Group Reported Barriers

- Lack of/limited availability of dedicated weekend scheduling staff
- No primary or specialty care staff available for scheduling
- Limited/no access to online or electronic appointment scheduling
- Limited access to neurologists
- Support for more immediate post-stroke follow-up varies
Limitations in this Study and Work

- No verification of the % of appointments made that were kept
- Registry does not collect post-discharge care outcomes
Conclusions

- Significant gap in stroke care continuity
- Patients discharged on weekends at a disadvantage for having a scheduled follow-up appointment at discharge
- Discharge planning earlier in the hospital stay may promote improve care continuity
- Research is needed to delineate timing of follow-up, method of follow-up (phone, home, clinic, office), provider for follow-up
- Studies of efficiency and effectiveness coupled with best practices for promoting a safe transition could lead to meaningful improvements in stroke care delivery and patient outcomes
Improving Stroke Care Continuity: It is going to take a village

THANK YOU TO THE COMMITTED PARTNERS IN OHIO