Emergency Preparedness Plan (EPP) Series
6: Care Coordination and Surge

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Co-Founder & Chief Operating Officer, Blackbox Healthcare Solutions

Health Services Advisory Group
Wednesday, July 19, 2023
Agenda

• Upcoming EPP Webinars
• Care Coordination and Surge
• Q&A
# Upcoming EPP Webinars

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
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<tbody>
<tr>
<td>August 16, 2023</td>
<td>Engaging Your Staff—Being Prepared at Home</td>
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<tr>
<td>September 20, 2023</td>
<td>Table-Top Exercises—Planning For and After Action</td>
</tr>
<tr>
<td>October 18, 2023</td>
<td>Top Ten ETag Deficiencies</td>
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<tr>
<td>November 8, 2023</td>
<td>EOP—Updating and Utilizing the CAHF Templates for Disaster Preparedness and Survey Success</td>
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</tbody>
</table>
Introductions

Erin Tams
REACH – Executive Oversight Role – Leadership Support, Data & Analytics
Erin Tams, MSHI
Co-Founder & Chief Operating Officer
Blackbox Healthcare Solutions

Charley Larsen
REACH – Executive Oversight Role – Leadership Support, Clinical Processes
Charles Larsen, RN, MSHI, MBA
Co-Founder & Chief Nursing Officer
Blackbox Healthcare Solutions
An Equity Enhancing Support Model, Developed From Lessons Learned Through the Arizona Surge Line
Our Predecessor –

- Public Health Emergency Response Tool
  - Public Health funded and operated
  - Use mandated through Executive Orders

- Patient Eligibility: COVID Suspected + Confirmed

- Goals: Load Balancing + Expediting Care
  - Expedite patient transfer to higher level of care
  - Expedite patient transfer to lower level of care
  - Safety net for interfacility transport
  - Provide critical care and palliative care consultation
Weekly Utilization Trend –

- **Active Period:** April 2020 to April 2022
- **10k+ Patient Transfers**
  - 85% Higher Level of Care
  - 13% Post Acute Facility
  - 2% Behavioral Health
Patient Transfer to Higher Level of Care

Originating facility / doctor
Calls Arizona Surge Line

Surge Line Transfer Agent
Performs minimum clinical intake

Surge Line Transfer Agent
Determines appropriate destination system

Surge Line Transfer Agent
Patches call to determine receiving destination transfer center

Destination transfer center does intake MD approval, bed placement, transport
Interfacility Transfer Patterns –

<table>
<thead>
<tr>
<th>Surge 1</th>
<th>Surge 2</th>
<th>Surge 3</th>
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</thead>
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Higher Level of Care Transfer Patterns by Surge Routes Between Referring & Admitting Locations

© 2022 Mapbox © OpenStreetMap
Disruption in Hospital Discharge to Post Acute

- Limited number of post-acute care facilities accepting COVID-19 isolation patients
- July 2020, Arizona Department of Health Services contracted with skilled nursing facility operators to hold available beds
  - Began with 9 skilled nursing facilities
- Post Acute Care Capacity Tracker (PACCT) is deployed to improve visibility into available capacity
- December 2020, added 2 “high acuity” locations for medically complex patients
Isolation Alternative Care Site (IACS) Process

**Patient Eligibility:**
- COVID-19 patients, stable for hospital discharge, but require isolation
- Patients requiring skilled nursing care
- Patients with a post-isolation placement plan started
- Patients cleared by case management for placement in an IACS bed

[Link to Eligibility PDF](https://www.azdhs.gov/covid19/documents/healthcare-providers-surge-line/iacs-eligibility.pdf)
PACCT is a web application for:
- Post-acute care facilities to input public health surveillance and bed availability data
- Public health to maintain awareness of post-acute facility capacity for COVID-19 patients
- Acute care hospitals to easily see and place discharged patients with COVID-19.
1. The number of residents who have tested positive for COVID-19 and require isolation.
2. The facility’s ability to accept new COVID-19 admissions on that day.
3. The facility’s current admission criteria for those with COVID-19.
4. The number of beds available overall, and
5. The number of beds available for those who have active or previous cases of COVID-19.
The Arizona Surgeline PACCT Dashboard View

Post Acute Care Capacity Tracker
Arizona Department of Health Services

Table Updated by Post Acute Care Providers data submissions

Accepting COVID-19 Patients

Map and Details

Download data

Legend

Last Edited
Download data in Excel ( downloadable file updated daily at Noon)

Accepting COVID-19 Patients

Yes
No
Not Updated in Last 48 Hours
“Wait A Minute!”

The Problem: The interfacility patient transfer process has become increasingly burdensome for independent and rural health providers, widening access to care gaps between rural and urban communities.

Who is Affected: Arizona’s rural hospitals are primarily classified as critical access, Indian Health Services (IHS), P.L.93-638, or community non-profits. Data from the Arizona Surge Line showed that from 230+ referring locations over two years of operations:

- Nearly 85% of patient transfers came from these hospital types
- 67% of transfers originated from rural locations

What is Happening:
Periods of high hospital occupancy or low staffing can cause extensive wait times for patient acceptance, triggering the referring provider to attempt numerous hospitals for acceptance. While interfacility transfers are a routine business practice, the work effort and burden required to facilitate these transfers ultimately fall to the referring care team and patients.
This Is How We Move Patients

METHODS OF TRANSFER
REACH

What is REACH?

• AZ REACH streamlines the transfer process by facilitating calls for placement, connecting physicians, and following through on placement progress, allowing referring facility team members to focus on bedside care. In addition, AZ REACH will provide referring hospitals with comprehensive reporting on their patient transfer trends and any unmet needs they are experiencing.

• We are a voluntary, free 24/7 service that coordinates acute medical care transfers out of IHS, PL 93-638, and critical access hospitals across Arizona.

Vision: We envision a future where every Arizonan has equitable access to care.
Funding – A Braided Model

- Approximately $2M/year
- Current **braided** funding:
  - Hospital Preparedness Program
  - ARPA funds
  - Health Disparities Grant
  - Public Health Crisis Response Workforce
REACH Scope

**IN SCOPE**
- Medical transfers from a participating hospital
- Reason for transfer
  - Higher level of care
  - Specialty not available
  - Continuity of care
  - Capacity
  - Insurance
- Public Health Emergency Response

**OUT OF SCOPE***
- Non-Medical transfers
  - Behavioral Health
  - Post-Acute (SNF, LTACH, Rehab, Hospice)
- Physician Consultations
- Requests from non-participating hospitals
- Transportation Coordination

*Future expansion of services could allow for the inclusion of behavioral health, post-acute transfer needs, and other services.
The Transfer Process

1. **Originating facility/doctor**
   - Calls AZ REACH

2. **AZ REACH**
   - Performs minimum intake
   - Calls system(s) as requested* by the sending facility & relays intake information
   - *If none requested, will choose closest facility/system with capability & capacity.

3. **AZ REACH**
   - Sends intake information to Destination facility
   - **Destination facility**
     - Does intake, MD approval*, & bed placement
     - *Doc to doc coordinated through AZ REACH

4. **Destination facility**
   - Releases landing location to AZ REACH
   - AZ REACH releases landing location to originating facility*; cancels request with other systems if applicable.
   - *Originating facility coordinates transportation
## Guiding Data Sources

Closest facilities with the requested capabilities

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<tr>
<th>Facility Name</th>
<th>Distance</th>
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<tr>
<td>Banner Health</td>
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<tr>
<td>Banner Goldfield Medical Center</td>
<td></td>
</tr>
<tr>
<td>Steward Health Care</td>
<td>98 mi</td>
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<tr>
<td>Steward - Mountain Vista Medical Center</td>
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</tr>
<tr>
<td>Honor Health</td>
<td>103.6 mi</td>
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<tr>
<td>HonorHealth Scottsdale Thompson Peak Med Ctr</td>
<td></td>
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<tr>
<td>Tenet-Abrazo Health</td>
<td>108.1 mi</td>
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<tr>
<td>Abrazo Cave Creek Hospital</td>
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## The Patient Acceptance Tracking

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<tr>
<th>Total Patients Accepted: 14</th>
<th>ICU</th>
<th>Med Surg</th>
<th>Tele/PCU</th>
<th>ED</th>
<th>Trauma</th>
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<tr>
<td>Total Patients Pending: 2</td>
<td>150 min</td>
<td>180 min</td>
<td>185 min</td>
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<th>296</th>
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<th>239</th>
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<th>140</th>
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<th>56 min</th>
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Administration

ARIZONA DEPARTMENT OF HEALTH SERVICES

(Funding)

THE UNIVERSITY OF ARIZONA

(Grant Recipient)

blackbox

(Administration)
Daily Staffing

- Dedicated Leadership
  - 1.0 FTE On-site Clinical Director (RN)
  - 0.875 FTE Executive Leadership Support
  - 0.875 FTE Reporting & Data Analysts

- Clinical Staff Coverage 24/7
  - EMTs, Medical Scribes, Physician Assistant Students, etc.
  - 12.0 FTEs
  - Hours allocated on bell curve to meet hourly volume trends
Benefits to: Sending Hospitals

- Practitioners and staff back to the bedside
- Ease of transfers
- Enhanced equitable access to care
- Public Health Emergency response infrastructure
- Single point of contact
- Robust data
- Electronic record of transfer
- Seat at the regular governance council meetings
Benefits to: Receiving Organizations

- Common point of contact
- Waitlist release / clean-up
- No disruptions in current transfer patterns
- Routine follow-up with referring, better updates with care team & less frequent follow-up requests from the sending facilities
- Recorded phone calls
- Option for public health emergency response
Benefits to: Public Health

- Real time data of health of the healthcare system
- Regional mapping of services
- Immediate re-activation of Surge Line possible
- Ability to adapt to public health emergencies
  - Respiratory season (*tested in 2022)
  - Pandemic
  - Mass Casualty Incident
## 6-Month Review - Participation

### REACH Summary of Operations
YTD Q4 12/13/22 to 6/30/23

<table>
<thead>
<tr>
<th>Participation Metrics</th>
<th>Central</th>
<th>Northern</th>
<th>Southern</th>
<th>Western</th>
<th>Grand Total</th>
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<tr>
<td>Eligible Referring Locations</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>22</td>
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<tr>
<td>Referring Location Utilization</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Utilization %</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<table>
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<tr>
<th>Transfer Outcome Metrics</th>
<th>Central</th>
<th>Northern</th>
<th>Southern</th>
<th>Western</th>
<th>Grand Total</th>
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</thead>
<tbody>
<tr>
<td>% Total Requests by Region</td>
<td>40%</td>
<td>32%</td>
<td>25%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Requested Transfer Volume</td>
<td>1,157</td>
<td>916</td>
<td>738</td>
<td>84</td>
<td>2,895</td>
</tr>
<tr>
<td>Accepted Transfer Volume</td>
<td>1,043</td>
<td>834</td>
<td>680</td>
<td>76</td>
<td>2,633</td>
</tr>
<tr>
<td>% Transfers Accepted</td>
<td>90%</td>
<td>91%</td>
<td>92%</td>
<td>90%</td>
<td>91%</td>
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Date Range: 12/13/2022 to 6/30/2023
# 6-Month Review – Requested Specialties

**Top 15 Requested Medical Specialties**

<table>
<thead>
<tr>
<th>Speciality</th>
<th>Central</th>
<th>Northern</th>
<th>Southern</th>
<th>Western</th>
<th>Statewide</th>
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<tbody>
<tr>
<td>Cardiology</td>
<td>216 (19%)</td>
<td>201 (22%)</td>
<td>145 (20%)</td>
<td>20 (24%)</td>
<td>582 (20%)</td>
</tr>
<tr>
<td>GI - General</td>
<td>104 (9%)</td>
<td>114 (12%)</td>
<td>81 (11%)</td>
<td>1 (1%)</td>
<td>300 (10%)</td>
</tr>
<tr>
<td>General Surgery</td>
<td>127 (11%)</td>
<td>62 (7%)</td>
<td>65 (9%)</td>
<td>8 (10%)</td>
<td>262 (9%)</td>
</tr>
<tr>
<td>Internal Medicine (Medical)</td>
<td>46 (4%)</td>
<td>63 (7%)</td>
<td>53 (7%)</td>
<td>6 (7%)</td>
<td>168 (6%)</td>
</tr>
<tr>
<td>Pulmonology</td>
<td>70 (6%)</td>
<td>63 (7%)</td>
<td>72 (10%)</td>
<td>7 (8%)</td>
<td>212 (7%)</td>
</tr>
<tr>
<td>Neurology-General</td>
<td>35 (3%)</td>
<td>64 (7%)</td>
<td>39 (5%)</td>
<td>6 (7%)</td>
<td>144 (5%)</td>
</tr>
<tr>
<td>Nephrology</td>
<td>57 (5%)</td>
<td>55 (6%)</td>
<td>49 (7%)</td>
<td>7 (8%)</td>
<td>168 (6%)</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>60 (5%)</td>
<td>38 (4%)</td>
<td>26 (4%)</td>
<td>2 (2%)</td>
<td>126 (4%)</td>
</tr>
<tr>
<td>Urology</td>
<td>78 (7%)</td>
<td>25 (3%)</td>
<td>17 (2%)</td>
<td>3 (4%)</td>
<td>124 (4%)</td>
</tr>
<tr>
<td>Neurology-Stroke Intervention</td>
<td>41 (4%)</td>
<td>38 (4%)</td>
<td>10 (1%)</td>
<td>3 (4%)</td>
<td>92 (3%)</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>35 (3%)</td>
<td>17 (2%)</td>
<td>17 (2%)</td>
<td>2 (2%)</td>
<td>71 (2%)</td>
</tr>
<tr>
<td>GI - Complex (ERCP, EUS, etc.)</td>
<td>17 (1%)</td>
<td>20 (2%)</td>
<td>21 (3%)</td>
<td></td>
<td>58 (2%)</td>
</tr>
<tr>
<td>Hand</td>
<td>36 (3%)</td>
<td>10 (1%)</td>
<td>6 (1%)</td>
<td>1 (1%)</td>
<td>53 (2%)</td>
</tr>
<tr>
<td>Interventional Radiology</td>
<td>15 (1%)</td>
<td>16 (2%)</td>
<td>6 (1%)</td>
<td>1 (1%)</td>
<td>38 (1%)</td>
</tr>
<tr>
<td>ENT</td>
<td>25 (2%)</td>
<td>12 (1%)</td>
<td>11 (1%)</td>
<td>3 (4%)</td>
<td>51 (2%)</td>
</tr>
<tr>
<td>All Other Requested Specialties</td>
<td>195 (17%)</td>
<td>117 (13%)</td>
<td>120 (16%)</td>
<td>14 (17%)</td>
<td>446 (15%)</td>
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**Date Range:** 12/13/2022 to 6/30/2023
# 6-Month Review – Admitting Level of Care

## REACH Summary of Operations
**YTD Q4 12/13/22 to 6/30/23**

### Transferred Levels of Care

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<thead>
<tr>
<th></th>
<th>Central</th>
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<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Tele/PCU</td>
<td>391</td>
<td>37%</td>
<td>354</td>
<td>42%</td>
<td>189</td>
<td>28%</td>
<td>27</td>
</tr>
<tr>
<td>Med Surg</td>
<td>358</td>
<td>34%</td>
<td>200</td>
<td>24%</td>
<td>186</td>
<td>27%</td>
<td>19</td>
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<tr>
<td>ED</td>
<td>156</td>
<td>15%</td>
<td>101</td>
<td>12%</td>
<td>201</td>
<td>30%</td>
<td>22</td>
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<tr>
<td>ICU</td>
<td>116</td>
<td>11%</td>
<td>162</td>
<td>19%</td>
<td>84</td>
<td>12%</td>
<td>6</td>
</tr>
<tr>
<td>Trauma</td>
<td>21</td>
<td>2%</td>
<td>10</td>
<td>1%</td>
<td>6</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Gen Peds</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
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<td>4</td>
<td>1%</td>
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<td></td>
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<tr>
<td>OB Triage/L&amp;D</td>
<td>3</td>
<td>0%</td>
<td></td>
<td></td>
<td>2</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,043</td>
<td>100%</td>
<td>834</td>
<td>100%</td>
<td>680</td>
<td>100%</td>
<td>76</td>
</tr>
</tbody>
</table>

**Date Range: 12/13/2022 to 6/30/2023**
6-Month Review – Patient Demographics

Date Range: 12/13/2022 to 6/30/2023
AZ REACH participating hospitals encouraged their public health departments to attend their steering committee meetings. Several public health departments regularly attend.

Public health made some requests:

- Immediate REACH expansion due to pediatric and respiratory surge (2022)
- Public health requested (2023): Report on impact of Title 42

REACH had some requests for information: new trends, regulatory guidance
Feedback From Participating Hospitals

“I am so thrilled that you are providing this service to our community facilities!” - TMC (Receiving Facility)

“When we call AZ REACH they reach out to numerous hospitals in Arizona, one of the issues for us is having the available staff to coordinate these transfers, and this is where AZ Reach provides a lot of support.”

“I am excited to see what we will be able to accomplish in our time together!” - Parker (IHS)

“I am excited to share the services REACH provides as we have faced challenges with finding beds for patients.” - Sage (PL.93-638)

“We appreciate your efforts to facilitate transfers for rural facilities!” - White Mountain (CAH)

“We’re incredibly excited for this resource. Thank you for supporting our ability to find specialty services for our patients. I expect this to provide immediate relief to our front-line clinical staff.” - Whiteriver (IHS)

“We truly appreciate and THANK YOU for assisting Rural Healthcare organizations with the transfers!” - Wickenburg (CAH)
Early Learnings / Opportunities

- The significant workload on sending facilities
  - December 2022: Calling 26 facilities/organizations to place one patient
- Clinical intake question standardization need
- Duplicative provider-to-provider discussions
- Urgent need for capability list by hospital
- Keeping REACH involved
  - Bed assignments
  - Doc-to-Doc conversations
- Need for expansion of services
Possible Future Expansions

- **TRANSPORTATION**
  - Track and trend

- **BEHAVIORAL HEALTH**
  - Placement & transport

- **POST ACUTE**
  - Placement & transport

- **CONSULTS / TELEHEALTH**
  - Without intent to transfer

- **EMERGENCY MANAGEMENT**
  - Seasonal surge vs. MCI

- **RETURN TO HOME**
  - After higher level of care treatment
Three Take-Aways

1. This is a replicable model

2. Funding is available, but not easy – find a champion

3. Be adaptable early
Three Things to Do by Next Wednesday

• Identify potential issues with transferring or discharging a patient.

• Collect data around discharge placement.

• Meet with key leaders from the care continuum and start or continue the conversation.
Questions?
Thank you!

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