

The UW Health Virtual Command Center:

Expanding Reach, Improving Access

Kimberly Kenney, DNP, RN, BS, CCRN, Program Director, eICU

Jeffery Ulrich, BSN, Program Director, Ancillary Services

PHILIPS

UWHealth

Kim Kenney, DNP, RN, BS, CCRN

Program Director, eICU

- 27 years in Critical Care
 - Experience on all sides of eICU
 - Site – COR – Leadership
- Additional experience:
 - ER
 - Med Flight (Transport)
 - Nurse Educator
 - Adjunct Faculty
 - Patient & Provider Safety



Jeff Ulrich, BSN

Regional Program Director

26 Years in Nursing

Started nursing career with a Critical Access Hospital

- Emergency Room RN
- House Supervision
- Critical Care Ground Transport

19 years with UW Health and current role as

- Regional Program Director

I have always work with our regional clients.

- Telestroke
- Patient Acuity and Staffing software
- Adult Remote Read Team
- PACS Contracts



UW Health & eICU

Committed Healthcare Providers at the University of Wisconsin –Madison

- Serving over 800,000 patients annually
- Team of 1,800+ physicians and 24,000+ staff
 - Operating 6 hospitals and 90+ specialty & primary care locations across the Upper Midwest

Introducing Our eICU Program

- Launched in 2008 to enhance community support
- Provides critical care support to regional hospitals in Wisconsin and Northern Illinois
- Currently covers 123 beds across 12 hospitals and 15 units
 - 61 internal beds at UW Health
 - 62 external beds at partner hospitals
- Acts as a virtual safety net, ensuring high-quality remote critical care



Virtual Care Command Center

The Command Center Team: Always On, Always Ready

Coverage: 24/7/365

- 1 Board-Certified Intensivist
- 3 Critical Care Nurses
- 1 Nursing Assistant

Our Services:

- Collaborative Care: We work together seamlessly.
- RN and Provider Mentoring: Sharing knowledge and expertise.
- Support and Education: Keeping patients close to home.
 - Start locally, then expand our reach.

Meet the Command Center Team:

- Nursing Assistants: Our “Air Traffic Controllers,” ensuring safety and coordination.
- Registered Nurses: Case reviewers, mentors, and champions of proactive care.
- Providers: Addressing urgent needs, reviewing the most critical cases, and offering collaborative support to regional care teams.



Why Virtual Care/ eICU ?

- UW Health invested in virtual care, partnering with Philips to bring high level intensive care support to local and regional patients.
- The primary goal is to keep more patients in their home hospitals to be treated locally.
- Provide a proactive approach to regional care using data collected through eCaremanager software to review and revise care delivery.
- Multiple studies have shown the positive impact to patients, families, and healthcare systems when patients can be kept local for treatment:
 - Improved patient outcomes with early intervention
 - Improved patient and family satisfaction
 - Improved provider satisfaction

Extending Our Reach

How we support rural/community hospitals:

- Proactive approach
- RN education and mentorship
- Encourage collaboration and team approach
- MD/APP support through care conferences and direct communication
- Collaboratively decide to keep/transfer of patient
- Build skill and confidence within the rural/community teams to increase the acuity and types of patients they care for.

Why outreach matters to us and those we partner with:

- Keep the right care local
- Brings academic medical center care models to rural communities (equity)
- Improve overall staff retention including nursing and providers
- Support of board-certified intensive care to augment on-site care.

Outreach Scenarios



Enhancing Regional Capability Through eICU Support

- During the first two weeks of eICU service activation
- A regional partner successfully managed two patients with arterial pressure lines onsite
- Achieved through real-time collaboration and oversight from the eICU team
- Demonstrates early impact of virtual critical care in expanding local capacity



Rapid Stabilization Through eICU Collaboration

- Patient “A” admitted to regional eICU bed
- Rapid deterioration: required intubation, sedation, pain control
- eICU RN and Providers supported bedside team until onsite staff arrived
- Sedation needs exceeded initial dosing
- eICU and onsite providers collaborated to optimize sedation for comfort and cardiac safety (changed med & dose)
- Pain management added to stabilize patient prior to transfer to higher level of care

Outreach Scenarios

The Command Center Team: Always On, Always Ready



eICU Support During the COVID -19 Pandemic

- Support for regional hospitals through education and clinical expertise.
- Collaboration with bedside nurses on ventilators, BiPAP/CPAP, vasopressors, sedation, pain control, and monitoring.
- Regional hospitals received COVID patients knowing they had eICU backup.
- Real-time support ensured high-level care for complex cases.

Integrated Clinical Intervention:

Early Detection and Communication of patient changes.

- The eICU RN identified rapid patient decline and promptly communicated with the bedside RN to coordinate care.

Interdisciplinary Teamwork

- Collaboration between bedside RN, Hospitalist, and eICU Intensivist ensured expert guidance and swift response.

Coordinated Clinical Interventions

- Comprehensive treatments including lab tests, IV fluids, vasopressors, and antibiotics were administered promptly.

Positive Patient Outcome

- Effective coordination stabilized the patient, avoiding transfer and enabling discharge after intensive monitoring.

Wins & Impact

Patient benefits:

- Care close to home
- Cost effective
- Family closer

Hospital benefits :

- 24/7 expertise without full on-site staffing
- RN Mentorship

UW Health benefit:

- New partnerships
- Improved bed utilization
- Improved patient outcomes



RN Mentorship

- Any RN - new grad or new to ICU care
- Formal or Informal
- Formal: 3 connection points with PRN connections - this is scheduled for 2-6 weeks
 - Depends on the RN comfort/support needs
 - 1:1 with eICU RN supporting the specific site
- Informal: Any RN calls at any time with any questions.



The Art of Outreach

- Connect with the Regional Client(s)
- Right Size Services to Meet the Needs
- Provide Guidance to Grant Opportunities
- Establish Legal Agreements
- Provide a Consultative Approach with Technology / Connectivity
- Establish Credentialing
- Establish Regional EMR / PACS Access
- Provide Marketing and Regulatory Requirements
- Embrace the Partnership to Ensure Success
- Prove Value with Quality Accurate Data in Score Cards

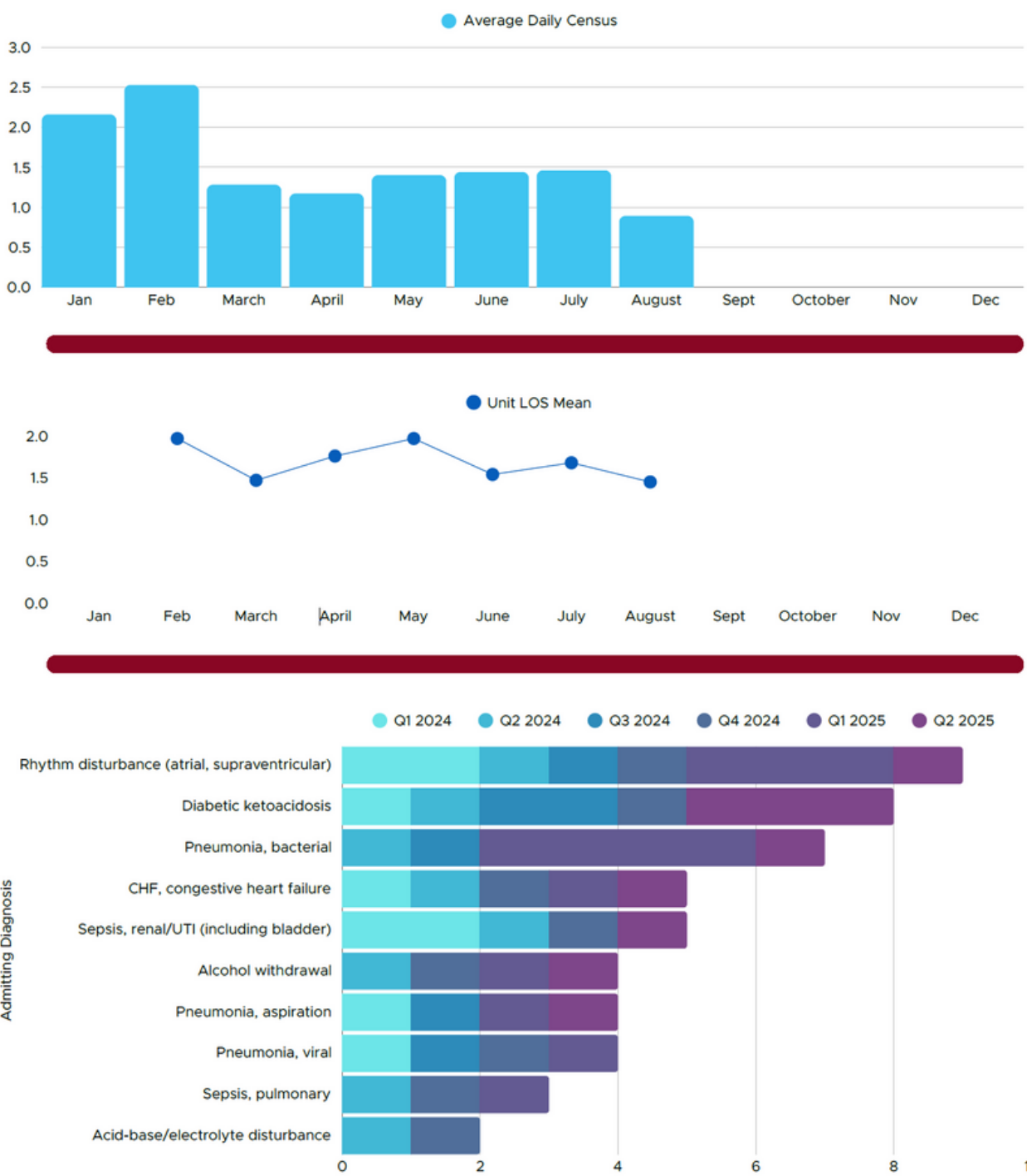


Understanding our Impact

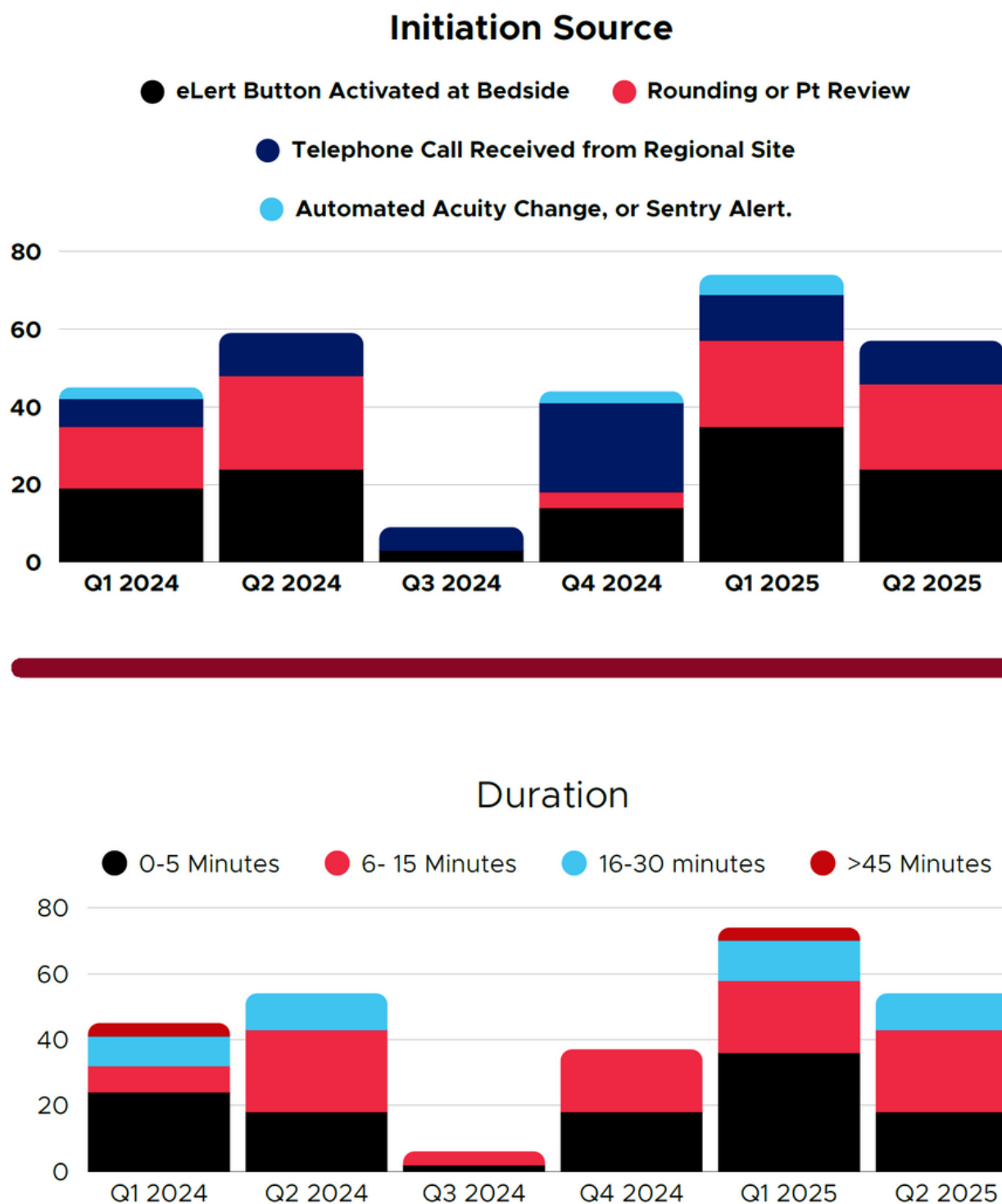
- Evaluate Transfer Request Data
- Review Increases to Patient Census
- Identify a Decrease in Closed Unit Shifts
- Identify Financial Saving with Reduced Staff Turnover
- Provide Case Studies and Celebrate Success Stories
- Enjoy Watching Staff Work at the Top of Their Licensure

Showing Value

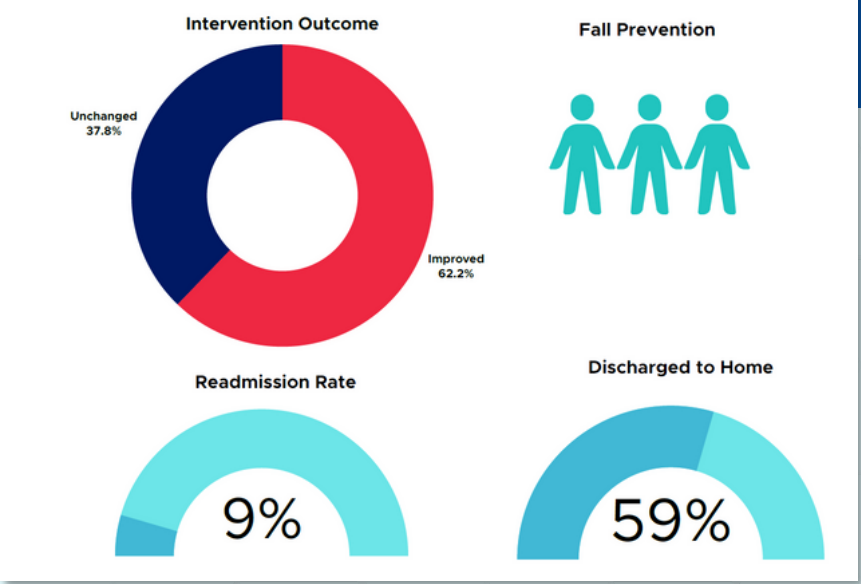
eICU Score Card



Interventions



Patient Outcomes



Additional Elements:

- Provider engagement
- Unit quality measures
- Equipment readiness

Transfer Related Considerations

- **Cost Savings**

- No Ambulance:
 - Typical cost:
 - BLS run: \$940
 - ACLS run: \$1,277
- No Medical Flight:
 - Air Ambulance: \$12,000-\$55,000
 - Helicopter Ambulance: \$ 30,466

- **Impact on patient and family**

- No travel to large city
- No additional cost
- Can visit patient more easily when kept at the regional hospital.

- **Impact on the site hospital**

- Improved access to advanced support
- Revenue for their organization
- Improved skill and confidence in ability to support higher acuity patients



Vision for the Future

- Integrate various technology solutions into one cohesive comprehensive platform while remaining vendor agnostic
- Provide a holistic view of patient utilizing AI and algorithm technology
- Continue to grow the number of regional locations
- Collaborating to include Pediatric care models of the future
- Create Self-Serve Reporting and Analytics Capabilities

Lessons Learned & What's Next?

- What's been working best for us
 - Standardization
 - Site Visibility/Connection
 - Open Communication
 - Active Partnership
- Future plans for scaling and improving impact.
 - Continual Growth
 - Add external sites
 - Expansion within UW Health
 - Improving proactive approach
 - Improved statistical reporting

Questions?

Kimberly Kenney, DNP, BS, CCRN, Program Director, eICU

Jeffery Ulrich, BSN, Program Director Regional Ancillary Services.

Questions for the presenters or for Philips, please contact Meaghan Gonzalez:
Meaghan.Gonzalez@philips.com